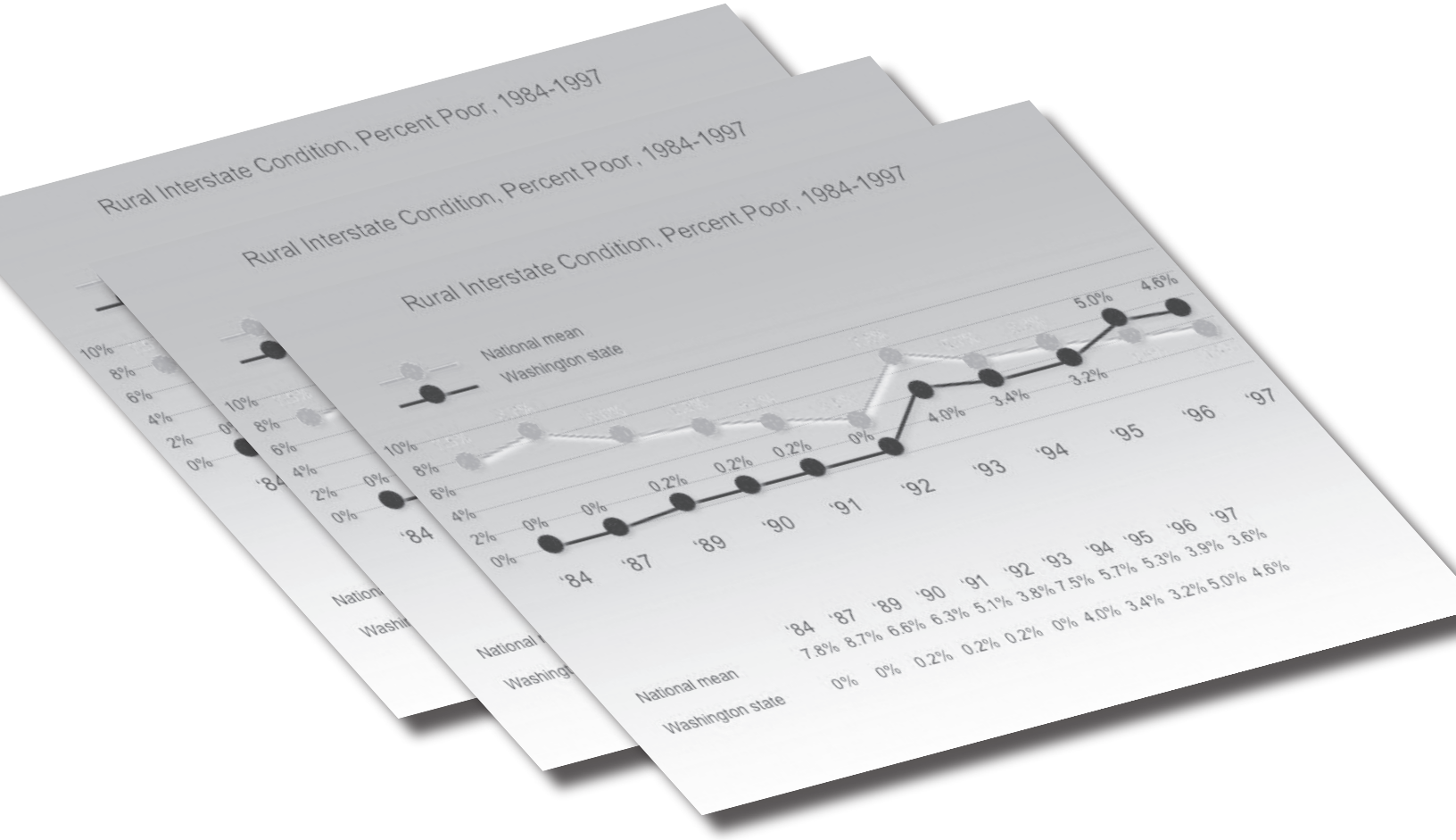

STUDY OF TRANSPORTATION GOALS, BENCHMARKS AND TEN–YEAR INVESTMENT CRITERIA AND PROCESS

final report

SUBMITTED TO
THE WASHINGTON STATE
TRANSPORTATION PERFORMANCE AUDIT BOARD (TPAB)

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FEBRUARY 15, 2006

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FEBRUARY 15, 2006

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February 15, 2006

To Governor Gregoire and the Washington State Legislature:

This is a report about reforming reform.

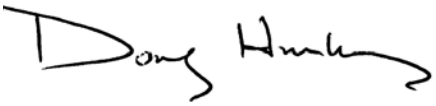
Demands for accountability and performance measurement are not new. Performance Budgeting legislation, Blue Ribbon Benchmarks, Priorities of Government–based budgeting, Performance Auditing, Grey Notebook reports, GMAP reporting and page upon page of legislatively mandated capital investment criteria are all parts of the same accountability instinct.

It had gotten to the point that DOT had so many places to report to on a given day and so many data bits were sought that accountability reforms had created their own clutter.

This report offers an approach to cut through the clutter, to provide a simple system, a common vocabulary and consistent, regular reporting on key performance measures.

This proposed system builds on, integrates and simplifies prior accountability efforts. We urge you to implement this approach and stick with it for a while, perhaps five to ten years. Then a new generation will doubtless want to adopt new reforms; hopefully they will do so without just "piling on."

Sincerely,



Doug Hurley, Chair

Study of Transportation Goals, Benchmarks and Ten–Year Investment Criteria and Process

Washington State Transportation Performance Audit Board

February 2006

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Appendices

I. Study Scope

A. Mandate

The Transportation Performance Audit Board (TPAB) retained Lund Consulting, Inc. and Cedar River Group in October 2005 to conduct a study and make recommendations related to the goals, benchmarks, investment criteria, and performance measures currently in state law relative to the Washington State Department of Transportation (WSDOT).

TPAB was mandated by the 2005 Washington State Legislature to conduct a study and make recommendations to the Legislature regarding the modification of RCW 47.01.012, state transportation goals and benchmarks. TPAB was required to consider at a minimum the following: the original recommendations of the Blue Ribbon Commission; current policy goals and benchmark categories; goals outlined in Substitute House Bill 1969; the recent work related to benchmarks completed by the Transportation Commission and TPAB; the measures review completed by TPAB; and best practices. (*ESSB 6091 Section 206 subsection 2*)

TPAB was also required to conduct a review of the comprehensive ten-year investment program process, including the required criteria, under RCW 47.05.030 and 47.05.051 (ESSB 5513 Section 19 subsection 2) and to develop performance measures and benchmarks for the evaluation of expenditures of the transportation partnership account. (*ESSB 6103 Section 104 subsection 3*)

Since these all focus on legislation which mandates criteria, priorities and goals related to transportation, TPAB chose to combine them into a single study in order to facilitate the creation of a coherent system of performance measurement and investment criteria. See Appendix A for further information on legislative mandates.

As part of the study, TPAB required:

- A description of the current system, including a flow chart documenting the current process in creating the ten-year investment plan from beginning to end.
- An assessment of WSDOT's current status in regard to compliance with RCW 43.88.090, including a description of the status of the referenced strategic plan, performance measurements, and the department's internal assessment of performance against such standards.
- A flow chart which outlines any proposed revisions to the ten-year investment process, and/or WSDOT's compliance with RCW 43.88.090.
- A description and diagram of how the current process and criteria interact with federal and regional planning priorities, process, criteria and least-cost planning requirements and a description of how the proposed process and criteria will interact with each of those elements.
- Recommendations regarding appropriate criteria, goals, benchmarks and processes. Recommended benchmarks, goals and criteria must be consistent, simple, reliable, and measurable. The recommendations must recognize that whatever the criteria and goals become, they must be easily and meaningfully communicated to the public.

- Consideration should be given to the recommendations/information produced by the 2005 Transportation Work Group which has been meeting to coordinate the efforts and instructions of the various interested groups into a cohesive set of performance measurements.

The scope of this study was limited to benchmarks, goals, performance measures, and investment criteria in relationship to the Washington State Department of Transportation. The study did not include other state-authorized agencies with transportation responsibilities such as the Washington State Patrol, the Department of Licensing, County Road Administration Board, Freight Mobility Strategic Investment Board, Transportation Improvement Board, regional transportation planning organizations, or transit agencies.

B. Study Objectives

The consultants worked with TPAB to establish eight objectives to guide the development of recommendations. For each objective the criteria to determine whether the recommendations meet the objective are listed.

OBJECTIVE 1: Improve the use of performance measures for external accountability, communication and reporting.

Criterion 1a: Does the performance measure system allow conformance with the GASB suggested criteria for effective communication?

The Governmental Accounting Standards Board (GASB) recommended sixteen criteria in their special report *Reporting Performance Information: Suggested Criteria for Effective Communication*. These sixteen were used in TPAB's *Department of Transportation Highways and Ferries Program Performance Measure* report to the Legislature in January 2005 to weigh WSDOT's current performance measurement reporting. GASB criteria are listed in Appendix B.

Criterion 1b: Do the performance measures reflect available information about public interest in accountability?

WSDOT's public surveys include information about public interest in performance reporting. In its report *Public Views on Washington State Transportation and Funding* in November 2004, Sage Projections found in a survey in five targeted areas (Olympic Peninsula, Clark County, Spokane County, Tri-Cities and Wenatchee) that the respondents believed that "knowing where the money is spent" and "knowing that projects are on time and within budget" are the best ways of demonstrating accountability. (*Sage, p. 8*)

OBJECTIVE 2: Relate the performance measures to the overarching performance goals of the state transportation system.

Criterion 2a: Is there stakeholder concurrence on identification of overarching performance goals?

The review of best practices and of WSDOT's planning documents will be used to recommend performance goals for WSDOT, TPAB and stakeholder agreement.

Criterion 2b: Do the proposed overarching performance goals allow WSDOT to report on key measures of accountability in a comprehensive, yet concise manner?

The GASB criteria note the importance of focusing on key measures and reporting on all major activities in a concise manner.

Criterion 2c: Do the proposed overarching performance goals encompass the array of significant WSDOT program goals and strategic plans?

WSDOT has a number of key strategic planning documents, including, but not limited to, the Washington Transportation Plan; Washington State Ferries Strategic Plan and 5+5+5 Business Plan; Target Zero, A Strategic Plan for Highway Safety 2000; Ten Year Passenger Strategy for Washington's Multimodal Ferry Transportation System 2005; and WSDOT's 2003-07 Business Plan. These and other strategic plans need to be encompassed within the overarching performance goals.

OBJECTIVE 3: Distinguish between transportation system performance, state agencies' performance, and WSDOT performance.

Criterion 3a: Does the proposed measurement system lend itself to providing tiered information from the transportation system to the individual agency responsibility?

Providing a tiered performance measurement system is a way to distinguish transportation system performance from individual agency, including WSDOT, performance and is recommended by GASB.

OBJECTIVE 4: Identify and consistently report on a few key accountability measures.

Criterion 4a: Can the proposed key measures be consistently tracked?

One of the key components of the GASB report on effective communication of performance measures is the identification of a few key measures that are consistently tracked and reported.

OBJECTIVE 5: Clarify accountability measurement terminology by simplifying it and conforming to GMAP and POG programs.

Criterion 5a: Does the proposed performance measurement system conform to GMAP and POG?

Priorities of Government (POG) and Government Management Accountability and Performance (GMAP) are interrelated Washington state accountability programs, with POG relating budget decisions to ten policy goals for the State of Washington. GMAP is intended to give the public a clear, concise view of how government programs are working and whether citizens are receiving value for their dollars. "POG is about budgeting. GMAP is about managing. POG helps the Governor and agencies make decisions on where to invest money to get the results that matter most to citizens. GMAP provides continuous feedback on how well the money is being used to achieve those results." (*GMAP Washington, Guidelines for Agencies, May 5, 2005*)

While allowing agencies to utilize their own performance measurement system, the GMAP model identifies outputs that relate to immediate outcomes, intermediate outcomes and ultimate outcomes.

OBJECTIVE 6: Distinguish performance accountability measure reporting from organizational reporting.

Criterion 6a: Does the performance measurement system lend itself to a multi-layered reporting system linking the overarching performance goals of the state transportation system, WSDOT's key measures and ongoing organizational reporting?

The GMAP process emphasizes the relationship between disciplined strategic planning, systematic measurement and the analysis of performance and alignment of employee work with agency goals. One of the GASB criteria for effective performance measurement reporting is to provide for multiple layers of reporting, so that those who are interested can drill down for more related information.

OBJECTIVE 7: Provide for evolution of performance measures.

Criterion 7a: Does the system describe the next steps in the evolution of performance measures and when they should be accomplished?

The Washington State Transportation Commission is responsible for developing the Washington State Transportation Plan (WTP), a 20–year policy plan. WSDOT staffs the Transportation Commission to prepare the WTP and the WTP policy guidance directs WSDOT in its management, construction and operation of the state-owned components of the transportation system. WSDOT prepares a ten–year investment plan as part of its biennial budget. The performance measurement system should be related to the periodic updates of the WTP and the ten–year investment plan in order to remain relevant.

Criterion 7b: Does the performance measurement system include a "new measures" component that will allow for integration of refinements in data collection and analysis of transportation systems?

Performance measurement is an evolving field with work being done throughout the nation to develop better means of measuring the transportation system's performance. TPAB's *Department of Transportation Highways and Ferries Program Performance Measure* report to the Legislature in January 2005 noted that "transportation benchmarks have developed to the point that there is a basis for them to evolve in several areas including roadway conditions, safety, congestion, air quality and cost effectiveness." (*TPAB Letter to the Legislature Jan. 27, 2005, p. 7*) The performance measurement system should allow for the development of better measurement tools and for WSDOT to develop improved methods of data collection and retention.

OBJECTIVE 8: Make transportation investment criteria clear, with clearly stated goals and priorities.

Criterion 8a: Do the investment criteria derive from a clear set of instructions?

Programs receiving federal funding must conform to federal laws and requirements with respect to planning, procurement, environmental protection, civil rights, hiring practices, prevailing wages, and homeland security, among others. At the state level, research has revealed over twenty different codes that apply to state transportation investments. Within each of these codes are additional lists of investment criteria, many without instruction regarding the priorities among the criteria.

Criterion 8b: Do the investment criteria relate to the overarching performance goals of the state transportation system?

The investment criteria must relate to the goals of the transportation system. The Blue Ribbon Commission in its *Accords to Guide Recommendations* (May 18, 2000), stated: "The public deserves a set of investments that will achieve the goals for an efficient and effective transportation system." (*Blue Ribbon Commission: Final Recommendations to the Governor and Legislature, p. 29*)

II. Executive Summary

A. Mandate

TPAB conducted this study to meet three mandates from the 2005 Washington State Legislature:

1. Conduct a study and make recommendations to the Legislature regarding modification of RCW 47.01.012, state transportation goals and benchmarks.
2. Review the comprehensive ten-year investment program process, including the required criteria under RCW 47.05.030 and 47.05.051.
3. Develop performance measures and benchmarks for the evaluation of expenditures of the transportation partnership account.

TPAB members also asked that the consultants consider the following:

- Develop a performance measurement system for external audiences.
- Develop a coherent and simple to understand reporting system.
- Develop measures for system performance.
- Develop measures for quality of projects delivered.
- Align the budgeting process to the benchmarks so that the Legislature is consciously "buying" given levels of accomplishment, with a predicted future component to assist in long-term policy and capital project development, and a cost effectiveness component.

The consultant's met with representatives of the WSDOT several times during the course of this study. Issues the WSDOT representatives asked the consultants to be mindful of in formulating recommendations included:

- Ensure that recommended performance measures can in fact be measured with existing data, or with data that are possible to obtain.
- Distinguish between system performance and agency performance.
- Recognize that performance measures are an iterative process to be refined as time passes.

B. Study Objectives

The consultants worked with TPAB to establish eight objectives for the study:

1. Improve the use of performance measures for external accountability, communication and reporting by meeting the Governmental Accounting Standards Board's (GASB) criteria for external reporting of performance measures.

2. Relate the performance measures to the overarching performance goals of the state transportation system.
3. Distinguish between transportation system performance, WSDOT performance and the performance of other state agencies with transportation responsibilities.
4. Identify and consistently report on a few key accountability measures.
5. Clarify accountability measurement terminology by simplifying it and conforming to Government Management Accountability and Performance (GMAP) and Priorities of Government (POG) programs.
6. Distinguish performance accountability measure reporting from organizational reporting.
7. Provide for the evolution of performance measures.
8. Make investment criteria clear, with clearly stated goals and priorities.

C. Description of the Current System

1. WSDOT

- WSDOT's mission is: "To keep people and business moving by operating and improving the state's transportation systems vital to our taxpayers and communities."
- WSDOT' s management values are leadership, project delivery and accountability, progressive business practices, safety, environmental responsibility, excellence and integrity, and clear, concise, and timely, communication.
- WSDOT is responsible for implementing one of the largest transportation improvement programs in the nation, with the passage of the 2005 Transportation Partnership Program and the 2003 "Nickel Program".

2. WSDOT's Goals, Benchmarks and Performance Measures

WSDOT has goals, benchmarks and performance measures established by state law and/or state mandated plans that are not aligned.

- RCW 47.01.012, adopted in July 2002, mandates nine policy guides as the basis for establishing detailed and measurable benchmarks as a response to the Blue Ribbon Commission on Transportation's recommendation that the State adopt benchmarks as a cornerstone of government accountability.
- Seventeen performance goals for WSDOT have been established in the Washington State Transportation Plan 2003-2022 and nine statewide issues have been identified in the update of the Plan to be completed in June 2006. The current WTP was adopted in February 2002, prior to the state adopting RCW 47.01.012, establishing benchmarks.
- Six strategic objectives have been identified in the 2003-07 Business Directions, WSDOT's strategic plan adopted pursuant to RCW 43.88
- Previous TPAB studies have recommended that the Washington Transportation Plan be used to 1) organize all potential mandates as stated in various pieces of transportation legislation and to connect them to legislatively mandated benchmark categories; (2) to review, adjust and improve the benchmarks; and 3) to communicate the results as the over-arching performance goals of Washington's transportation system.
- Substitute House Bill 1969, which passed the House in 2005, proposed to modify the benchmarks in RCW 47.01.012 to three areas: maintain the existing system, manage the existing system and investing in the system.

3. WSDOT Investment Criteria and Planning Process

WSDOT's planning and investment decisions are influenced by federal requirements, state requirements, and regional planning.

- The federal government has established a framework of planning requirements and processes to improve the quality of decisions about investing in transportation infrastructure, with both FHWA and FTA requiring state and local entities to enact long (20–year) and short-term (three– to five–year) transportation plans. Federal requirements for state plans list 23 factors to be addressed by states completing long–range transportation plans.
- The consultants found 73 investment criteria in Washington state law, including ten needs identified under RCW 47.01.011, 35 investment criteria and sub-criteria identified for the state's ten–year investment plan and 18 criteria for the statewide multi-modal plan. There is little to no prioritization amongst these various criteria.
- There are 11 Metropolitan Planning Organizations and 14 Regional Transportation Planning Organizations (RTPOs) in Washington state that are responsible for the development of federal and state required transportation plans.

4. Findings

Despite efforts to increase accountability through the use of performance measurement and investment criteria, the plethora of instructions and measurements do not meet the GASB test of "providing a basis for understanding the extent to which an organization has accomplished its mission, goals and objectives in the context of potential significant decision-making or accountability implications." (GASB *Suggested Criteria for Effective Communication Special Report Summary,* p. 5). They only partially meet with this study's objectives described on pages 2–4.

Table 1: GASB Criteria and Recommendations

GASB Criteria	Current Performance Measurement System Conformance with Criteria
Statement of major goals and objectives	The current benchmarks and key measures are primarily focused on highways and, in particular, those highways in urban areas.
Involvement in establishing goals and objectives	The goals and objectives are not aligned.
Multiple levels of reporting	There are multiple levels of reporting but there is not a consistent linkage through a tiered performance measurement system.
Analysis, results and challenges	Current Gray Notebook reports analyze results and challenges facing WSDOT.
Focus on key measures	WSDOT reports on many measures.
Reliable information	WSDOT has a strong track record of providing reliable information.
Relevant measures of results	WSDOT has relevant measures of results in many areas.
Resources used and efficiency	Some of the reported measures include cost information (i.e. capital project delivery within budget).
Citizen and customer perception	Customer satisfaction surveys are available and the results are occasionally available in the Gray Notebook.
Comparisons for assessing performance	Comparisons are available by tracking through issues of the Gray Notebook, which are indexed.
Factors affecting results	WSDOT reports on factors affecting results.

GASB Criteria	Current Performance Measurement System Conformance with Criteria
Aggregation and desegregation of information	WSDOT aggregates and disaggregates information in the Gray Notebook.
Consistency	The benchmarks are reported annually and some of the other performance measures are consistently reported. (See Appendix I for a complete list of reporting performance measures and dates of report.)
Easy to find, access and understand.	The Gray Notebook is complex and challenging for public readers.
Regular and timely reporting	Reporting is quarterly through the Gray Notebook.

D. Best Practices

The consultants reviewed performance measurement in ten other states. The states reviewed are: Florida, Kentucky, Maryland, Michigan, Minnesota, Missouri, New Mexico, Ohio, Oregon, and Virginia. These state were identified based on WSDOT's *State of the Practice Inventory* (March 2004), and by TPAB members. The best practices for performance measurement in these states are:

- Establishing an overarching set of three to four performance goals for the state transportation system.
- Establishing the overarching performance goals in the state long-range transportation plan and using these goals to frame the investment plan, operating budget priorities, external reporting and performance measurement.
- A systematic identification of focus areas, strategies or objectives that link the overarching performance goals to performance measures.
- Distinguishing the transportation department's performance from the performance of the transportation system.
- Establishing a limited number (20 to 30) of key performance measures that are used for external accountability.
- Utilizing effectiveness and customer satisfaction measures for external reporting along with limited use of efficiency measures.
- Providing easily digested and readable reports for external audiences.
- Having state laws that allow for the evolution of performance measures.
- Providing a "crosswalk" to the statewide performance measurement system.

E. Recommendations

The consultants' recommendations are based on the study objectives and the best practices review and are consistent with the requirements of RCW 43.88, TPAB's recommendations and WSDOT's effort to align their strategic goals and performance measures as reported in the September 2005 *Gray Notebook*.

1. Performance Measurement

A tiered approach to performance measurement, investment criteria and investment planning is recommended that links the goals of the state transportation system to the POG goals and has:

- Common terminology.
- Three overarching performance goals:
  - To improve the safety and security of transportation customers and systems.
  - To improve the predictable movement of people and goods.
  - To be effective managers of transportation assets and public resources.
- Three to five objectives for each performance goal.
- System performance measures/ultimate outcomes separate from WSDOT's key performance measures.
- Thirty or fewer WSDOT key performance measures.
- Targets set by WSDOT for each measure.

The Proposed WSDOT Goals, Objectives and Performance Measures chart on pages 11–12 shows the recommended performance measurement alignment. Key measure areas are recommended, with potential measures identified and targets to be set by WSDOT.

2. Investment Criteria

Relating the investment criteria to performance measures and thus to the overarching performance goals of the state transportation system is recommended. Transportation goals, objectives and measures should be reported consistently in the 20–year transportation plan, the ten–year investment plan and the budget.

3. Legislative Action

The study recommends that the existing statues, benchmarks, and other investment criteria be replaced by new legislation that is clearly aligned with overarching goals for the state transportation system. The intent is to align these overarching goals with the Priorities of Government, the budget, and with required transportation plans. The legislature should adopt only the goals with the objectives and corresponding performance measures and investment criteria not codified. The consultants recommend a proviso to direct the Governor, Office of Financial Management and WSDOT to report back to the legislature with the objectives and corresponding performance measures and investment criteria.

A model for such legislation might be the State of Maryland which mandates a 20–year plan based on goals and objectives that are linked to an annual consolidated transportation plan. The annual plan includes six–year listing of programs and projects and an annual report "on the attainment of transportation goals and benchmarks for the approved and proposed Maryland Transportation Plan and proposed Consolidated Transportation Plan." (Section 2-103.1) Maryland identifies system objectives but leaves the determination of specific measures to the Maryland Department of Transportation.

The consultants also recommended that an annual attainment report similar to the approach used in Maryland should be required of WSDOT to be submitted to the Governor and Legislature.

The consultants recommend that, in the interim between this legislative session and the next session, the legislature review and revise the RCW's pertaining to transportation planning and investment criteria. The goals of this review are to simplify the codified investment instruction and to remove redundancy.

F. Recommendations and Objectives

The recommendations meet the study objectives by:

- Conforming to GASB criteria for external reporting of performance measures.
- Relating the performance measurement system to the transportation system goals.
- Distinguishing between transportation system performance, state agencies and WSDOT performance.
- Allowing for consistent reporting on a few key accountability measures.
- Proposing common terminology.
- Distinguishing performance accountability reporting from organizational reporting.
- Providing for the evolution of performance measures by recommending that the system objectives be legislatively mandated rather than the specific measure.
- Making investment criteria clear by linking them to system goals, priorities and performance measures.

Table 2: Proposed WSDOT Goals, Objectives, and Key Measures

POG	Goal	Objectives/System Measures	WSDOT Major Activities	WSDOT Key Measure Area	WSDOT Potential Measure	WSDOT Target
To improve the security of people and property.	To improve the safety and security of transportation customers & system.	**Highway Hazard Reduction** •System measure: Vehicular accidents (deaths/ VMT)	•Highway maintenance •Safety capital projects	1. Safety improvement project delivery 2. Effectiveness of safety projects 3. Vehicular accidents	1. Number of TPA HAL projects completed 2. Before and after combined average for safety projects collisions/year 3. Highway related deaths, natural and engineering–related (per VMT)	
		Bridge Hazard Reduction •System measure: Seismic retrofit status all bridges	•Bridge maintenance •Capital projects	4. Bridge seismic retrofit program status 5. Bridge seismic status WSDOT bridges	4. Planned vs. actual number of projects advertised in high risk zone 5. Percent of bridges meeting WSDOT seismic standards	To be determined
		WSF Security & Safety •System measure: Safety plan compliance	• Safety plan • Compliance with MTSA	6. Safety plan compliance	6. Results of internal safety audits	
		Emergency Mgmt •System measure: CEMP readiness	•CEMP role •JOPS	7. CEMP preparedness	7. Status of joint WSP/WSDOT measure development	
To improve statewide mobility of people, goods, information & energy.	To improve the predictable movement of people and goods.	**Efficient Use of Highways—Urban Areas** • System measure: Change in the 95% reliable travel time on key corridors	•Demand management •Traffic operations •Capital projects	8. Effectiveness of highway projects in relieving congestion 9. Effectiveness of traffic operations and demand management or cost per throughput	8. Before and after congestion results: case studies 9. TBD (e.g., change in person throughput per lane during peak periods)	
		Efficient Use of Highways—Statewide •System measure: Throughput on all state highways	•Maintenance •Snow and ice •Incident response	10. Maintenance quality 11. Avalanche control 12. Incident response	10. Number of WSDOT's 22 maintenance targets achieved 11. Closure times: 1-90, Snoqualmie Pass 12. Average number of minutes to clear incidents that last over 90 minutes	

POG	Goal	Objectives/System Measures	WSDOT Major Activities	WSDOT Key Measure Area	WSDOT Potential Measure	WSDOT Target
		WSF Operations •System measure: Capital asset development to meet 5, 10 and 15 year load projections	•Operations •Maintenance •Capital projects	13. Trip reliability 14. Customer satisfaction/affordability	13. Trip reliability index 14. Customer survey results	
		Transit Ridership •System measure: % of transit seats utilized	•ACCT •Grants	15. Disadvantaged ridership 16. Non–urban area access to transit	15. TBD (e.g., number of one-way trips provided for transportation disadvantaged) 16. TBD (e.g., annual public transit ridership in rural areas)	
To improve statewide mobility of people, goods, information & energy.	To be effective managers of transportation assets and public resources.	**Preservation** •System measure: Achievement of optimal life cycle % on all transportation assets	•Pavement paving •Bridge repairs & preservation •Ferry terminal preservation •Ferry vessel preservation	17. Pavement condition 18. Bridge condition 19. Ferry preservation	17. Percent of pavement in good, fair or poor condition vs. optimal life cycle % rating 18. Percent of bridges in good, fair or poor condition vs. optimal life cycle % rating 19. Life cycle rating for vessels vs. optimal life cycle rating	To be determined
		Capital Project Quality & Delivery •System measure: Project status and quality of construction	•Capital projects	20. On-time/on-budget highway project status 21. On-time/on-budget ferry project status 22. Construction quality 23. Reasonableness of mitigation undertaking and costs	20. Percent of highway projects complete on schedule and budget 21. Percent of ferry projects complete on schedule and budget 22. Quality rating system to be developed 23. TBD (e.g., costs of mitigation in relation to project objectives)	
		Environmental Management • System measure: Transportation system adherence to environmental regulations	•Capital project environmental compliance •Operations environmental compliance	24. Environmental compliance	24. Number of projects in compliance	
		Workforce Management •System measure: Employee satisfaction	•Human resources management	25. Skill level of project managers and engineering staff 26. Workforce safety	25. TBD (e.g., percent of project managers and engineering staff with skills that meet WSDOT needs) 26. Recordable injuries per 100 workers	

III. Description of the Current System

A. WSDOT

1) Mission and Values

The mission of the Washington State Department of Transportation (WSDOT) is: "To keep people and business moving by operating and improving the state's transportation systems vital to our taxpayers and communities."[1] Its management values are:

- **Leadership:** We are committed that WSDOT provide strategic vision and leadership for our state's transportation needs.
- **Project Delivery and Accountability:** We shall manage the resources taxpayers and the legislature entrusted to us for the highest possible return on value. We shall be disciplined in our use of both time and money. We shall account for our achievements, our shortcomings and our challenges to citizens, to elected officials, and to other public agencies.
- **Progressive Business Practices:** We shall encourage progressive business management practices in delivering cost effective and efficient transportation services. Our quest for short-term cost savings and business process improvement shall be balanced by the long-term need to preserve and improve the state's transportation systems through sound fiscal planning and asset management.
- **Safety:** Concern for the health and safety of the people who use and work on our transportation facilities shall be a paramount value in every area of our business.
- **Environmental Responsibility:** Our work shall incorporate the principles of environmental protection and stewardship into the day-to-day operations of the department as well as the ongoing development of the state's transportation facilities.
- **Excellence and Integrity:** Our employees shall work in a culture of workplace excellence and diversity that encourages creativity and personal responsibility, values teamwork, and always respects the contributions of one another and of those with whom we do business. We shall adhere to the highest standards of courtesy, integrity and ethical conduct. We shall encourage and recognize our employees' professionalism and their career growth.
- **Clear, Concise, and Timely Communications:** We shall stress the importance of sharing clear, concise and timely information with WSDOT employees, elected officials, community leaders, businesses, citizens and taxpayers, others in the transportation community, with the press and other media. We shall strive for the effectiveness of all our employees in meeting WSDOT's communications standards.[2]

1. 2003-07 Business Directions, p. 1.

2. Ibid, p. 1.

2) Finances

WSDOT's FY 2005-07 capital and operating budget of $4.5 billion represents 77% of the state's transportation budget of $5.8 billion. WSDOT's operating budget is divided into 28 programs. The capital budget of $3.3 billion, which in FY 2003-05 represented 73% of WSDOT's total budget,[3] includes funding for highway construction, ferry system construction, capital facilities, traffic operations, rail and local programs.

On May 9, 2005 the Governor signed into law the "2005 Transportation Partnership Funding Package" to fund 274 projects across the state over the next 16 years at a cost of $7.1 billion. The package, a repeal of which was defeated by a statewide vote in November, 2005, includes:

- At–Risk Structures: $2.98 billion for 30 projects
- Safety Investments: $279 million for 106 projects
- Choke Points and Congestion: $2.95 billion for 69 projects
- Multi Modal Improvements: $94.8 million for eight projects
- Environmental: $108 million for 21 projects, plus funding for future fish barrier removal projects
- Freight Mobility and Economic: $542 million for 35 projects

This funding package was in addition to the transportation funding package, known as the"Nickel" program, enacted in the spring of 2003. The Nickel program added $4.2 billion over ten years to be expended for highways, ferries and other multi–modal projects. Other funding in place prior to these two packages provides approximately $4 billion for highway construction over the next ten years. Washington state's transportation program is one of the largest in the country.

B. WSDOT Goals, Benchmarks and Performance Measures

WSDOT has goals, benchmarks and performance measures established by state law and state mandated plans. Benchmarks were recommended by the Blue Ribbon Commission on Transportation (BRCT) and nine were incorporated into RCW 47.01.012. The Washington Transportation Plan—which was adopted in February 2002 before the Legislature enacted the Blue Ribbon Commission on Transportation's benchmarks—identifies 17 goals for the state transportation system. The 2003-07 Business Directions strategic plan adopted by WSDOT pursuant to RCW 43.88 has six strategic objectives. WSDOT has reported on the benchmarks and other performance measures through its Gray Notebooks.

The benchmarks are not linked to the goals in the Washington State Transportation Plan nor to the 2003-07 Business Directions. In the Sept. 30, 2005 *Gray Notebook*, WSDOT includes an article on linking measures to strategic objectives that align the 2003-07 Business Directions strategic objectives with key performance measures identified by the Department. The Transportation Benchmarks are not linked to the WTP transportation system goals nor are they linked to the Business Directions strategic objectives.[4]

1) Benchmarks

The BRCT recommended in its 2000 report to the Governor and Legislature that the State adopt transportation benchmarks as a cornerstone of government accountability at the state, city, county and transit district levels. The

3. Washington State Department of Transportation, 2005-2007 Current Law Budget Folio.

4. *Linking Measures to Strategic Objectives: Measures, Markers and Milestones*, September 30, 2005.

BRCT recommended eleven benchmarks and four areas for future benchmark development, with the intention that future funding decisions would be tied to progress in achieving the benchmarks.

In October 2001 the Transportation Commission formed a benchmark committee to develop and guide the use of benchmarks for WSDOT. The committee, working with the Secretary of Transportation and WSDOT staff, developed benchmarks and performance measures for the major categories recommended by the BRCT.

In July 2002, RCW 47.01.012 took effect, which identified the following nine policy guides as the basis for establishing detailed and measurable benchmarks:

1. Improving safety.
2. No interstate highways, state routes, and local arterials shall be in poor condition.
3. No bridges shall be structurally deficient, and safety retrofits shall be performed on those state bridges at the highest seismic risk levels.
4. Traffic congestion on urban state highways shall be significantly reduced and be no worse than the national mean.
5. Delay per driver shall be significantly reduced and no worse than the national mean.
6. Per capita vehicle miles traveled shall be maintained at 2000 levels.
7. The non-auto share of commuter trips shall be increased in urban areas.
8. Administrative costs as a percentage of transportation spending shall achieve the most efficient quartile nationally.
9. The state's public transit agencies shall achieve the median cost per vehicle revenue hour of peer transit agencies, adjusting for the regional cost of living.

2) Washington State Transportation Plan

In addition to RCW 47.01.012, 17 performance goals for WSDOT have been established in the Washington State Transportation Plan 2003-2022, organized around three visions and six focus areas. The Plan is currently being updated with nine key statewide transportation issues identified. The update is expected to be complete in June 2006.

Table 3: Washington State Transportation Plan (2003-2022) Goals

Visions	Focus Area	Performance Goals
Vibrant Communities	Taking Care of Basics	• System operations and maintenance: The transportation system operates effectively, efficiently and predictably. • System preservation: Transportation facilities are in sound operating condition. • Special needs transportation
	Moving a Growing Population	• Congestion relief: WTP corridors operate with minimal delay and continual reduction in the societal, environmental, & economic costs of congestion for people and freight. • Increased travel options: Throughout the state, travelers have viable alternatives to the privately owned automobile for their trips. • Seamless connections: The transportation system offers easy connections between different services throughout the state.

Visions	Focus Area	Performance Goals
	Improving Safety	• Continuously reduce injuries, fatalities and risks: A safe transportation system without deaths or disabling injuries and with continuous reductions in societal costs of accidents. • Increased security: Customers are safe and secure while using the transport system.
	Building Communities	• Effective community–based design: Integrated community design, land use, percent of transportation investments that improve quality of life. • Collaborative decision-making: Collaboration occurs between federal, tribal, state, regional, local and private sector partners.
Vital Economy		• Competitive freight movement: Freight movement is reliable and transportation investments support Washington's strategic advantage. • Support general economic prosperity: Transportation supports general economic prosperity. • Support for tourism: Recreational travelers have convenient and inviting access to tourist destinations.
Sustainable Environment		• Maintain air quality: Transportation services and facilities help maintain air quality by meeting air quality health standards. • Meet water quality standards: Transportation services and facilities help maintain water quality by meeting water quality standards. • Maintain habitat and watershed quality and connectivity: Transportation services and facilities help to maintain the quality of, and contribute to the recovery of, the ecological functions of watersheds and habitats. • Reuse and recycle resource materials: Transportation services and facilities prudently use, reuse and recycle resource materials.

Washington State Transportation Update Statewide Key Issues

"Transportation serves our economy, productivity, our communities' livability, our ecosystems viability, and our citizen's convenience."

Preservation: Ensure that today's transportation systems will continue to serve us into the future.

Safety: Make transportation infrastructure and facilities throughout the state safer and more secure for their users.

Transportation Access: Provide effective and affordable mobility options for those without access to an automobile or the ability to drive, especially in isolated areas.

System Efficiencies: Optimize the efficient operation of our current transportation facilities and those we develop in the future.

Bottlenecks and Chokepoints: Invest in new facilities and system assets that help address the most severely congested locations.

Moving Freight: Invest in the specific needs of goods movement as part of the state's transportation system.

Strong Economy and Good Jobs: Invest in new facilities and system assets that help strengthen the state's economic vitality and support family-wage jobs.

Health and the Environment: Develop, implement, and use transportation investments in ways that promote energy conservation, enhance healthy communities, and protect the environment.

Building Future Visions: Today's planning efforts should help shape visions of a transportation system for the future.

3) 2003-07 Business Directions

The 2003-07 Business Directions, WSDOT's strategic plan, adopted pursuant to RCW 43.88, identifies six goals, each of which includes associated performance measures and state benchmarks.

Table 4: 2003-07 Business Directions

Strategic Objective	# of published measures	Related benchmarks
Plan and build (deliver) capital investment projects for our transportation systems in accordance with the instructions of the legislature.	19	• Planned vs. actual project advertisements for safety construction program • Bridge structural condition rating • Pavement condition rating
Maintain and operate the transportation facilities and systems placed under the department's responsibility making cost-effective use of the appropriations provided by the legislature from citizens' taxes.	15	
Optimize the operational efficiency and safety of the transportation systems and facilities committed to WSDOT's charge.	22	• Percent change in fatal and disabling crashes and VMT • Travel times on 12 Puget Sound corridors • 95% reliable time during peak travel on 12 Puget Sound corridors • Average number of minutes to clear incidents that last over 90 minutes
Report to the Transportation Commission, citizens, other officials and the legislature on achievements, shortcomings and challenges in WSDOT's performance.	4	
Support the STC in preparing proposed budgets and plans for transportation systems and facilities.	2	
Assure the capability and efficiency of WSDOT's workforce.	7	• Administrative cost

In the September 2005 *Gray Notebook*, WSDOT linked its identified key measures with the 2003-07 Business Directions:

Table 5: 2005 Gray Notebook Key Measures Linked to 2003-07 Business Directions

Strategic Initiative	Key Measures
Plan and build (deliver) capital projects for our transportation system in accordance with the instructions of the legislature.	• Schedule, scope and budget summary of nickel and TPA projects • Project delivery milestone reporting • Highway construction program advertisements • Cash flow on highway construction projects • Individual contracts: final cost to award amount • Pavement conditions • Bridge conditions • Ferry life cycle preservation performance
Maintain and operate the transportation facilities and systems placed under the department's responsibility making cost-effective use of the appropriations provided by the legislature from citizen's taxes.	• Maintenance Accountability Process (MAP) targets • On-time performance: Amtrak Cascades and ferries
Optimize the operational efficiency and safety of the transportation systems and facilities committed to WSDOT's charge.	• Safety • Incident response clearance • Congestion: peak travel times for key commute routes
Report to the Transportation Commission, citizens, other officials, and the legislature on achievements, shortcomings and challenges in WSDOT's performance.	• Performance reporting • No surprise reporting – beige pages • End of season highway construction summary
Support the State Transportation Commission in preparing proposed budgets and plans for transportation.	• Biennial and annual budget proposals
Assure the capability and efficiency of WSDOT's workforce.	• Workforce training • Workforce safety

4) Other WSDOT Plans and Goals

A list of WSDOT's plans and reports establishing goals for WSDOT is included in Appendix I along with associated performance measures from the Gray Notebook and WSDOT's web site. These plans and reports include:

- 2005 Transportation Partnership Program.
- Joint Operations Policy Statement.
- State Highway Plan.
- Target Zero: A Strategic Plan for Highway Safety (2000).
- Security Guide for Washington State Ferries.
- Washington State Ferries Progress Report.
- Washington State Comprehensive Emergency Management Plan.
- Aviation System Plan 1993.

- Ten-Year Passenger Strategy for Washington Multimodal Ferry Transportation System.
- Update of Ferry Strategic Plan.
- 5+5+5 Business Plan for Washington State Ferries.
- Pacific Northwest Rail Corridor: Amtrak Cascades Plan for Washington State 1998-2004.
- Agency Council on Coordinated Transportation 2003-04 Report to the Legislature.
- Public Transportation and Intercity Rail Passenger Plan for Washington State 1997-2016.
- Review of Accountability Mechanisms for WSDOT Joint Legislative Audit and Review Committee, August 2005.
- Project Control and Reporting Guide: Managing Program Delivery at the Project Level, April 2005.
- Environmental Policy Statement 2001.
- WSDOT Executive Order on Context Sensitive Solutions.
- Transportation Efficiency and Accountability Committee Report.

5) WSDOT Goals, Benchmarks and Performance Measures Reviews

In August 2003, WSDOT issued its Transportation Benchmarks Implementation Report, reporting on results against the nine benchmark goals listed above. The report analyzed each benchmark for its relevance and applicability to WSDOT and, in some cases, recommended alternative measures. Results for each of the benchmark goals are reported annually in the June edition of WSDOT's *Gray Notebook* (distributed in hard copy and online). The 2005 Benchmark results are also available as a separate report: *GNB Excerpt: Transportation Benchmarks—2005 Report*.

In 2004, the TPAB provided a *Department of Transportation Highways and Ferries Program Performance Measure* report to the Legislature. The report included the final consultant report by Dye Management Group Inc. The Dye Management Group recommendations were to:

- Change RCW 47.01.012 to establish an overall set of transportation system performance goals and measures that address Washington's desired outcomes for the performance of the system.
- Continue to refine the WSDOT performance measurement system and establish an overall plan that considers policymaker priorities for its future development.
- Improve the usability of performance measurement information and the communication of this information to policymakers, the public and business partners.
- Strengthen the ability of WSDOT's information technology to support performance measurement and provide management information.

TPAB's transmittal letter for the final report states that:

- WSDOT is implementing an effective system of performance measurement to manage and provide accountability for delivery of products and services.
- WSDOT uses performance measurement to provide leadership, set direction, establish a performance-oriented culture and ensure accountability.
- WSDOT is using performance measurement information to manage resources and improve services to customers.
- WSDOT is providing, through its Gray Notebooks, information to the public on its performance measures,

but that their complexity makes them difficult for elected officials and the public to comprehend.

- State government can make significant improvements in aligning the planning and budgeting process with benchmarking; noting that one of the problems with benchmarking is when agencies are held accountable for under-funded benchmarks.
- Recommends that the Washington Transportation Plan when updated in 2006 (sic) be used: (1) to organize all potential mandates as stated in various pieces of transportation legislation and to connect them to legislatively mandated benchmark categories; (2) to review, adjust and improve the benchmarks; and (3) to communicate the results as the overarching performance goals of Washington's state transportation system.
- Recommends that WSDOT's performance measures be organized under the benchmark categories they support.
- Recommends that WSDOT staff, the Transportation Commission and the Legislature align the budgeting process to the benchmarks so that the Legislature is consciously "buying" given levels of accomplishment, with a "predicted future" component to assist in long-term policy and capital project development, and a "cost-effectiveness" component.
- Recommends that the benchmarks and measures evolve in several areas including roadway conditions, safety, congestion and air quality.

In the 2005 session, the State Legislature mandated TPAB to conduct a study and make recommendations regarding the modification of RCW 47.01.012 state transportation goals and benchmarks. Substitute House Bill 1969, which passed the House, would have modified RCW 47.01.012 to establish the following goals for performance measurement:

- Maintain the existing system: The state's transportation system, including interstate highways, state routes, bridges and local arterials, shall be maintained and preserved at an optimal percentage life-cycle rating.
- Managing the existing system: The performance of the state's transportation system shall be measured, and transportation agencies will manage to achieve levels of service that improve system performance over time for all transportation users.
- Investing in the system: Capacity investment decisions relating to the state's transportation system shall optimize performance for multiple modes of use and be based on differential performance standards for off-peak and peak hours.

C. WSDOT Investment Criteria and Planning Process

Federal and state laws drive state transportation investments. Federal law requires regional plans, and regional plans include state and local transportation investments. The transportation system is a multibillion dollar asset comprised of multiple modes. All of these factors combine to create a planning and investment process that is difficult to explain in clear language. Figure 2 on page 34 depicts one snapshot of the federal, state, regional, and local transportation structure.

1) Federal Requirements

a. Federal Authority

The Department of Transportation Act of 1966 empowers the Secretary of Transportation to make transportation investments that conform to a broad set of goals (*Title 49 U.S.C. 1.3.1 § 305*). The Secretary develops standards and criteria to formulate and economically evaluate all proposals for transportation investment. Plans must be developed taking into account:

- Projected growth of transportation needs and traffic in the affected area.
- The relative efficiency of various modes of transportation.
- The available transportation services in the area.
- The general effect of the proposed investment on existing modes of transportation and on the regional and national economy.

Congress enacts federal law governing transportation, including most recently changes to transportation law and funding in 2005. These laws and their related regulations are implemented by the U.S. Department of Transportation (USDOT). Of the USDOT's ten subagencies, two are critical for roads and transit: the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). In turn, these two agencies assist state departments of transportation and Metropolitan Planning Organizations (MPOs) in developing two kinds of plans: long-term transportation plans for twenty or more years and the shorter term "Transportation Improvement Program" (TIP) for two to four-year cycles. Inclusion in a TIP is necessary for federal funding.

b. Federal Priorities and Funding

Congress has set federal transportation priorities and funding through various enactments.

Federal funding for surface transportation projects is provided primarily by the highway trust fund, a fund that derives most of its revenue from an 18.4 cent per gallon tax on gasoline and a 24.4 cent per gallon tax on diesel fuel. (*Congressional Research Service, SAFETEA-LU: Selected Major Provisions, Report RL33119 [2005], CRS 2*). Previous federal acts set up predetermined levels of funding for "core highway and transit programs" with minimal funding guaranteed for certain types of projects, including interstate maintenance, national highway system, surface transportation program, highway bridge and bridge maintenance, congestion, mitigation, and air quality. (*Ibid. at CRS-4, 8.*) Individual states receive funding based on formulas outlined in each of these programs, including such factors as lane miles, vehicle miles traveled, estimated tax payments to the highway account, relative state share to repair or replace deficient bridges, or non-attainment and maintenance area population under the Clean Air Act. (*Ibid. at CRS 8-9.*)

In 2005, Congress expanded and modified these federal authorities by enacting the "Safe, Accountable, Flexible, Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU or SAFETEA). This act reauthorized a variety of federal highway, highway safety, and transit programs, provided up to $286.4 billion in guaranteed spending authority from FY2004-FY2009, and modified how federal funds could be spent. (*Ibid. at CRS 2-6.*) Of the authorized funding, Congress earmarked, or designated, funding of approximately $24 billion for various specified "congressional high priority projects," "projects of national and regional significance," "national corridor infrastructure improvements," "transportation improvements," and transit projects. (*Ibid. at CRS-14.*) Despite these earmarks, SAFETEA-LU left in place most of the fund allocations set up by previous federal transportation acts. (*Ibid. at CRS-8.*)

SAFETEA-LU did change some legal requirements for state and local planning entities. The Federal Highway and Federal Transit Administrations are working together to implement changes caused by SAFETEA-LU.[5] Despite these changes, the basic planning structure essentially remains the same.

c. Role of U.S. Department of Transportation

The USDOT is responsible for shaping and administering policies to protect and enhance the safety, adequacy and efficiency of the nation's transportation system and services. USDOT views transportation as a strategic investment essential to strengthening the American economy. USDOT's top priorities in 2005 were to:

- Keep the traveling public safe.
- Increase mobility.
- Ensure that the transportation system supports the nation's economic growth and development.

(*U.S. Department of Transportation, "Message from the Secretary," 2005 Performance and Accountability Report. http://www.dot.gov/perfacc2005/messages.htm*)

The USDOT organizes its work under six strategic objectives:

1. Safety: Promote the public health and safety by working toward the elimination of transportation-related deaths and injuries.
2. Mobility: Advance accessible, efficient, intermodal transportation for the movement of people and goods.
3. Global Connectivity: Facilitate a more efficient domestic and global transportation system that enables economic growth and development.
4. Security: Balance homeland and national security transportation requirements with the mobility needs of the nation for personal travel and commerce.
5. Environmental Stewardship: Promote transportation solutions that enhance communities and protect the natural and built environment.
6. Organizational Excellence: Advance the Department's ability to manage for results and achieve the goals of the President's Management Agenda.

(*U.S. Department of Transportation, "Performance Framework," 2005 Performance and Accountability Report. http://www.dot.gov/perfacc2005/parpart1.htm#framework*)

d. Federal Planning Requirements for State and Local Governments

The federal government has established a framework of planning requirements and processes designed to improve the quality of decisions about investing in transportation infrastructure. Much of this framework is included in recent transportation authorizing legislation (ISTEA, TEA-21 and SAFETEA-LU). This legislation and the associated regulations establish requirements governing the way states and local governments plan and decide upon transportation projects. Metropolitan planning organizations (MPO) and regional transportation planning organizations (RTPO) are an important component of this system. The overall approach for transportation planning and decision-making includes:

- Involving numerous stakeholders.
- Identifying state and regional goals.
- Developing long– and short–range state and metropolitan planning documents.
- Ensuring that a wide range of transportation planning factors is considered.

In addition, SAFETEA-LU expanded the scope of planning to include planned growth and economic development patterns. Security is now a stand-alone planning factor. Metropolitan and statewide transportation plans must also

5. See *Interim Guidance for Implementing Key SAFETEA-LU Provisions on Planning, Environment, and Air Quality for Joint FHWA/FTA Authorities* (Sept. 2, 2005), at http://www.fhwa.dot/gov/hep/igslpja.htm.

include a discussion of potential environmental mitigation activities, which are to be developed in consultation with federal, state and tribal agencies. The metropolitan planning process also is to promote consistency between transportation improvements and state and local planned growth and economic development patterns. Metropolitan transportation plans must include operational and management strategies to improve congestion, safety and mobility. MPOs must also develop and use a participation plan that provides opportunities for interested parties to comment on the plans.

For details from relevant regulations, see Appendix C, Federal Investment Criteria in Legislation and Regulations. For information on of SAFETEA-LU, see "SAFETEA-LU Implementation" (*http://www.fta.dot.gov/17003_ENG_HTML.htm), and Frequently Asked Questions: Metropolitan and Statewide Planning Provisions of SAFETEA-LU (http://www.fta.dot.gov/documents/FAQ_Planning.doc*).

Both FHWA and FTA require state and local planning entities to enact long– and short–term transportation plans. Planning can be conducted by the state department of transportation or by an MPO for designated urbanized areas with a population of 50,000 or more.[6] MPOs in areas with a population of 200,000 or more are designated as Transportation Management Areas (TMAs) under 49 U.S.C. §5305. The TMA designation carries additional responsibilities for planning such as preparing congestion management systems, but also greater local project selection authority through their MPOs and for funds earmarked for large urban areas.

As part of the transportation planning process, states and MPOs must collect and analyze data to help evaluate project priorities. These priorities are specified in state and metropolitan long-range (20–year) plans and short–range (three–year) programs. Short–range programs must specify funding sources and be financially constrained.

i. Transportation Improvement Program

The TIP is a short-term (three– to five–year) plan for a state or metropolitan area. The TIP must be consistent with the long-range plan and include all projects in the metropolitan area to be considered for federal funding. The TIP has several major elements, including the following:

1. A proactive and inclusive public involvement process.
2. Consideration of the following eight areas (see 23 U.S.C. §134(f), 135 and 49 U.S.C. §5303(b) for FHWA and FTA planning requirements, respectively):
    a. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
    b. increase the safety of the transportation system for motorized and non-motorized users.
    c. increase the security of the transportation system for motorized and non-motorized users.
    d. increase the accessibility and mobility of people and for freight.
    e. protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.
    f. enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
    g. promote efficient system management and operation.

6. See 49 U.S.C. §5303-5306, cited in USDOT FTA, Planning and Project Development Process overview, http://www.fta.dot.gov/16601_ENG_ HTML.htm (last visited 11/22/05) [hereinafter FTA Planning Overview]).

h. emphasize the preservation of the existing transportation system.

3. Area studies conducted to address significant transportation problems in a corridor or subarea that might involve the use of federal funds.
4. Development of financial plans for implementing the transportation plan and TIP.
5. Assurance that the transportation plan and TIP in air quality non–attainment areas conform to the State Implementation Plan as required by the Clean Air Act as amended.

ii. State Plans

States are also required to develop a long-term plan under 23 U.S.C. §135, along with a shorter three– to five–year State Transportation Improvement Program (STIP) subject to much the same criteria as for TIPs. States must also address an explicit list of factors identified in 23 C.F.R. §450.208. These factors include the following:

1. The transportation needs (strategies and other results) identified through the management systems required by 23 U.S.C. 303.
2. Any federal, state, or local energy use goals, objectives, programs, or requirements.
3. Strategies for incorporating bicycle transportation facilities and pedestrian walkways in appropriate projects throughout the state.
4. International border crossings and access to ports, airports, intermodal transportation facilities, major freight distribution routes, national parks, recreation and scenic areas, monuments and historic sites, and military installations.
5. The transportation needs of non-metropolitan areas (areas outside of MPO planning boundaries) through a process that includes consultation with local elected officials with jurisdiction over transportation.
6. Any metropolitan area plan developed pursuant to 23 U.S.C. 134 and Section 8 of the Federal Transit Act, 49 U.S.C. app. 1607.
7. Connectivity between metropolitan planning areas within the state and with metropolitan planning areas in other states.
8. Recreational travel and tourism.
9. Any state plan developed pursuant to the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq. (in addition to plans pursuant to the Coastal Zone Management Act).
10. Transportation system management and investment strategies designed to make the most efficient use of existing transportation facilities (including consideration of all transportation modes).
11. The overall social, economic, energy, and environmental effects of transportation decisions (including housing and community development effects and effects on the human, natural and manmade environments).
12. Methods to reduce traffic congestion and to prevent traffic congestion from developing in areas where it does not yet occur, including methods which reduce motor vehicle travel, particularly single-occupant motor vehicle travel.
13. Methods to expand and enhance appropriate transit services and to increase the use of such services (including commuter rail).
14. The effect of transportation decisions on land use and land development, including the need for consistency between transportation decision making and the provisions of all applicable short-range and long-range land use and development plans (analyses should include projections of economic, demographic,

environmental protection, growth management and land use activities consistent with development goals and transportation demand projections).

15. Strategies for identifying and implementing transportation enhancements where appropriate throughout the state.
16. The use of innovative mechanisms for financing projects, including value capture pricing, tolls, and congestion pricing.
17. Preservation of rights-of-way for construction of future transportation projects, including identification of unused rights-of-way which may be needed for future transportation corridors, identification of those corridors for which action is most needed to prevent destruction or loss (including strategies for preventing loss of rights-of-way);
18. Long-range needs of the state transportation system for movement of persons and goods.
19. Methods to enhance the efficient movement of commercial motor vehicles.
20. The use of life-cycle costs in the design and engineering of bridges, tunnels, or pavements.
21. The coordination of transportation plans and programs developed for metropolitan planning areas of the state under 23 U.S.C. 134 and Section 8 of the Federal Transit Act with the statewide transportation plans and programs developed under this subpart, and the reconciliation of such plans and programs as necessary to ensure connectivity within transportation systems.
22. Investment strategies to improve adjoining state and local roads that support rural economic growth and tourism development, federal agency renewable resources management, and multipurpose land management practices, including recreation development.
23. The concerns of Indian tribal governments having jurisdiction over lands within the boundaries of the state.

(*23 C.F.R. §450.208(a)(1)-(23)*)

Although federal regulations do not mandate a particular outcome, these factors will guide how states can prioritize their transportation needs and projects.

The various federal laws and regulations discussed above are critical to how state and local transportation planning is implemented. However, prioritization of actual projects occurs on a state and local level. In Washington, the WSDOT develops statewide plans while regional transportation planning organizations are the designated MPO and/or Transportation Management Area (TMA) to develop plans for their region.

iii. Factors for Selecting Projects

In selecting projects for the plan, states and MPOs must consider a wide range of planning factors. Key factors, as identified in federal requirements, include the following:

- Ensure compliance with provisions of the National Environmental Policy Act, Clean Air Act, and Civil Rights Act.
- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency.
- Increase the safety and security of the transportation system for motorized and non–motorized users.
- Increase the accessibility and mobility options available to people and for freight.
- Protect and enhance the environment, promote energy conservation, and improve quality of life.
- Enhance the integration and connectivity of the transportation system, across and between modes, for

people and freight.

- Promote efficient system management and operation.
- Emphasize the preservation of the existing transportation system.
- Promote congestion relief and prevention through management strategies/systems.

iv. Project Analysis

While federal requirements specify the factors to be considered, they generally do not specify the analytical tools planners should use to evaluate these factors. Other than the National Environmental Policy Act (NEPA) requirements for environmental analyses, federal requirements give states and MPOs considerable flexibility in selecting specific analytical tools and elements used to evaluate projects and make investment decisions. (*GAO, Surface Transportation, 2004, p. 4*)

For most surface transportation projects, current planning regulations require only that states and MPOs establish a process to conduct data analyses and evaluate alternatives for transit and highway projects. Federal planning requirements also state that the metropolitan planning process should:

- Consider the cost-effectiveness and financing of alternative investments to meet transportation demand.
- Support efficient transportation system performance.
- Consider the related impacts on social and economic development, housing and employment goals.

However, the requirements do not provide guidance to the states and MPOs on the types of analyses that are required or how they are to be prepared. There currently is no minimum set of elements that are required to be included in an analytical model. As a result, states and MPOs have largely been responsible for identifying and performing their own analyses during the planning process.

An exception to this approach applies to major transit system projects eligible for capital investment grants and loans under the FTA "New Starts" program. Under this program, FTA identifies and funds rail, ferry and certain bus projects (such as bus rapid transit). In contrast to other FHWA and FTA programs, funding commitments for the New Starts program are made for specific projects, and projects are evaluated at various stages in the development process. For New Starts projects, federal requirements are more specific in terms of the types of data to be collected, the criteria for conducting an analysis, and the factors involved in evaluating a proposed project. For example, for New Starts funding, local project sponsors must prepare an alternatives analysis on the benefits, costs and impacts of alternative strategies to address a transportation problem in a given corridor.

v. Analysis Tools and Least-Cost Planning

Several federal sources have identified benefit-cost analysis as a useful tool to help decision-makers determine trade-offs between alternatives and identify projects with the greatest estimated net social benefits. For example, Executive Order 12893 (Principles for Federal Infrastructure Investments) states that expected benefits and costs should be quantified to the maximum extent practicable when evaluating federal infrastructure investments, including transportation. Specifically, the principles include the following:

- Infrastructure investments must be based on systematic analysis of expected benefits and costs, including both quantitative and qualitative measures. All types of benefits and costs, both market and non-market, should be considered. Attempts must be given to quantifying environmental and other non-market benefits and costs.

- Benefits and costs should be measured and appropriately discounted over the full life cycle of each project.
- When the amount and timing of important benefits and costs are uncertain, analyses must recognize the uncertainty and address it through appropriate quantitative and qualitative assessments.
- Analyses must compare a comprehensive set of options including managing demand, repairing facilities, and expanding facilities.
- Analyses should consider not only quantifiable measures of benefits and costs, but also qualitative measures reflecting values that are not readily quantified.

(Executive Order 12893: Principles for Federal Infrastructure Investments, issued January 26, 1994. The order applies to spending for transportation, water resources, energy and environmental protection.)

Tools developed in response to this executive order have added an economic dimension to the typically engineering based decision-making process for transportation investments. The tools incorporate principles of benefit-cost analysis in order to minimize capital investment and use costs. Examples include the Highway Economic Requirements System model, transportation asset management, and least–cost planning.

An information sheet, *Impact Methodologies: Cost–Benefit* from FHWA, offers three methods for these analyses:

- Benefit-Cost Analysis Models: These calculate user benefits and external costs for alternative transportation networks or projects, and compare them with the capital, operation and maintenance costs of the networks/projects. User benefits, including time, operating costs and safety costs, are based on differences in travel patterns and transportation network characteristics.
- Life-Cycle Investment Models: These models compare alternative highway investment strategies by comparing user benefits with life-cycle capital, operating and maintenance costs under different strategies. The models are often used to assess tradeoffs between system expansion and system preservation, as well as to evaluate the benefits of different levels of investment.
- Other Cost-Benefit Analysis Methods—Least–Cost Planning: Least–cost planning is an approach for determining the transportation alternatives that will minimize the total social costs. It applies cost-benefit analysis techniques, and considers on an equal footing projects that reduce demand and those that expand supply.

(*FHWA, "Impact Methodologies: Cost–Benefit," http://www.fhwa.dot.gov/planning/toolbox/costbenefit_forecasting.htm*)

2) Washington State Investment Process

a. Transportation Planning and Priorities

In recent history, state transportation priorities have been identified by two different entities: the Washington State Transportation Commission (WTC) and the WSDOT. These entities are described below. In addition, see Appendix D, *Selected State Law Related to Transportation Planning*.

i. Washington State Transportation Commission (WTC)

Role: The WTC has a significant role in setting transportation policy and plans. (RCW 47.01.071 and 47.01.075).

The WTC's roles and responsibilities have changed as a result of legislative action taken during the 2005 legislative session. Below is a summary of the primary responsibilities of the WTC as of July 1, 2005. This summary is based

upon continuing statutory authority, new responsibilities, and tasks assigned to the WTC in other legislation.

The WTC's role in setting transportation policy was modified in a way that largely increased its role as a policy setting and advisory body to the Governor and the Legislature. This role includes the following significant policy mandates:

- Conduct a comprehensive tolling study.
- Conduct a rail capacity and needs study.
- Provide oversight and make key decisions related to the implementation of the newly created Transportation Innovative Partnerships program within the WSDOT.
- Prepare a biennial statewide multimodal transportation progress report to be submitted to the Governor.
- Offer ongoing policy guidance and recommendations to the Governor and the Legislature in key issue areas such as transportation finance, infrastructure needs, improving planning, and coordination among transportation agencies and providers.

The legislature removed the responsibilities from the WTC to: hire and fire the Secretary of Transportation; approve the WSDOT biennial budget and legislative policy packages; and provide detailed administrative oversight of WSDOT and its program delivery.

The Secretary of Transportation now serves at the pleasure of the Governor. The WSDOT is now a cabinet agency.

Current/Existing Responsibilities:

- Washington Transportation Plan: The Commission is responsible for preparing a comprehensive and balanced statewide transportation plan. The plan must be based on the transportation policy adopted by the Governor and the Legislature, and the applicable state and federal law.
- Bond Sales: The Commission is responsible for the issuance and sale of all bonds authorized by the Legislature for capital construction of state highways, toll facilities, urban arterial projects, and aviation facilities.
- Budget Oversight: The Commission has the authority to approve limited transfers of funds for Nickel projects based on specific criteria. The Commission is also authorized to approve transfers for Transportation Partnership projects.
- Highway Classification: The Commission is responsible for adopting a functional classification of state highways. This responsibility includes the authority to designate highways of statewide significance and the responsibility to designate a freight and goods transportation system, both of which carry state and federal funding eligibility implications.
- Freight and Goods Transportation System: The Commission is responsible for designating the state's Freight and Goods Transportation System. This system identifies highways and roadways most heavily used by trucks and provides factual data to support funding for projects that improve conditions for freight transportation. This information also supports planning for pavement upgrades, traffic congestion management and other investment decisions.
- Ten-Year Investment Program: The Commission must adopt a comprehensive ten-year investment program specifying program objectives and performance measures for the preservation and improvement programs at the WSDOT. The investment program must be forwarded as a recommendation to the Governor and the Legislature.

Of these roles, development of the Washington Transportation Plan (WTP) and the Ten–Year Investment Program are critical to transportation project prioritization in the state. Washington is required to develop a state transportation plan by both federal and state law. Under federal law discussed above, Washington must develop a statewide transportation plan that covers a period of at least 20 years.

Similarly, state law requires the Commission to "prepare a comprehensive and balanced statewide transportation plan which shall be based on the transportation policy adopted by the governor and the legislature and applicable state and federal laws." The plan must "take into account federal law and regulations relating to the planning, construction, and operation of transportation facilities." (*RCW 47.01.071(4)*)

ii. Washington State Department of Transportation (WSDOT)

The WSDOT is the state entity charged with planning and implementing transportation projects within the State of Washington. Federal law requires the state to prepare a long-term transportation plan and a short-term STIP. (*23 U.S.C. §135*) In conformance with these federal requirements, the WSDOT is also required to prepare a "statewide multimodal transportation plan" by RCW 47.06.040 which is met through the Washington Transportation Plan (WTP). For key congested corridors, WSDOT must also implement a cost–benefit analysis for projects likely to cost in excess of $100 million.

Washington Transportation Plan: The WTP provides a framework for transportation planning in Washington. This plan is to "ensure the continued mobility of people and goods within regions and across the state in a safe, cost-effective manner." (*RCW 47.06.040*). The plan must contain a component for investment in state-owned facilities, define the state's interest in various transportation modes, and recommend coordination with other public and private transportation providers.

This plan must be consistent with Washington's transportation policy plan, reflect public involvement, be consistent with regional transportation planning, high-capacity transportation planning, and local comprehensive plans prepared under the Growth Management Act, and include analysis of intermodal connections and choices.

The WTP currently in effect is dated February 2002. This 2003-2022 WTP "contains an overview of the current conditions facing the statewide transportation system, an assessment of the state's transportation investment needs for the next 20 years, and a statewide policy for transportation." The goals of the plan are outlined on page 20. This plan uses investment needs identified by individual RTPOs.

The WSDOT is currently working on updating the WTP. This next WTP is to include a ten–year implementation plan with a prioritized strategy for meeting transportation needs. The WTP will be released in 2006.

WSDOT Cost-Benefit Analysis for Major Congested Corridors: WSDOT may also conduct cost–benefit analysis for special planning studies under RCW 47.06.130. This statute requires WSDOT to conduct such studies for major congested corridors where the needed improvements are likely to cost more than $100 million. (*RCW 47.06.130(2).*) Under this analysis, WSDOT must examine the cost–effectiveness of all feasible strategies in addressing congestion or improving mobility within the corridor.

At a minimum, the cost-benefit analysis must consider:

- The current and projected future demand for total person trips on that corridor.
- The impact of making no improvements to that corridor.
- The daily cost per added person served for each mode or improved proposed to meet demand;
- The cost per hour of travel time saved per day for each mode or improvement proposed to meet demand.

- How much of the current and anticipated future demand will be met and left unmet for each mode or improvement proposed to meet demand.

Washington State Investment Criteria and Process Summary: WSDOT is to use least–cost planning principles. "Least–cost planning" means a process of comparing direct and indirect costs of demand and supply options to meet transportation goals and/or policies where the intent of the process is to identify the most cost–effective mix of options.

The Washington Administrative Code provides the following direction:

- The methodology shall consider direct and indirect costs and benefits for all reasonable options to meet planning goals and objectives.
- The methodology shall treat demand and supply resources on a consistent and integrated basis. The regional transportation planning organizations shall consult the guidelines set forth by the department for implementing a least-cost planning methodology.
- Regional transportation plans should incrementally incorporate least-cost planning methodologies as these concepts are developed.
- The regional transportation plan adopted after July 1, 2000, shall be based on a least-cost planning methodology appropriate to the region.

(*WAC 468-86-030 and WAC 468-86-080: Least Cost Planning*)

iii. Executive and Legislative Roles in Priority Setting

One of the primary recommendations of the Blue Ribbon Commission on Transportation (BRCT) in its December 31, 2000 Final Report was to "Establish a single point of accountability at the state level strengthening the role of the state in ensuring accountability of the statewide transportation system." To do this, the BRCT recommended the following: "[T]he Secretary of Transportation (sic) shall serve at the pleasure of the Governor. . . .The Governor shall have appointment authority over the Secretary, with confirmation by the Senate, . . . and the Governor will assume responsibility for the performance of the statewide transportation system, including proposing policies, plans, and budgets to the Legislature and executing the policies, plans and budgets enacted by the Legislature." (*Blue Ribbon Commission Report to the Governor and Legislature p. 44*)

During the 2005 legislative session, this recommendation was enacted into law (RCW 47.01.041), and the appointment of the Secretary was changed to become a power of the Governor. In addition, the role of the WTC changed to no longer include recommendation of a transportation budget to the Legislature. (RCW 47.01.070) The Governor now has that responsibility.

The Commission is still responsible for development of the statewide transportation plan as described in a previous section of this report. The Governor's new role includes transmittal of the transportation budget to the legislature as the single transportation budget proposal.

Also see Appendix E for selected executive orders that impact transportation planning.

b. The Decision Process for Investments

The volumes of plans and lists of investment criteria provide instructions to the WSDOT for conducting its investment decision process. There are ten "needs" identified under RCW 47.01.011, one of which is to "Set goals for the future." RCW 47.01.012 establishes policy goals for the state's transportation system, as encompassed by nine

benchmarks identified by the Blue Ribbon Commission on Transportation. There are 35 investment criteria and sub-criteria identified for the state's ten–year plan (*RCW 47.05.051: Ten–Year Comprehensive Investment Program: Priority Selection Criteria*), but none appears to require consistency with statewide goals. There are 18 criteria for the statewide multimodal plan (*RCW 47.06.040: Statewide Multimodal Transportation Plan*), one of which is to be consistent with the state transportation policy plan.

WSDOT submitted a report to the legislature in February 2004, *Washington State Department of Transportation Prioritization Process for State Highway Project*s, which described in detail the prioritization process for state highway projects. The report provides a review of the prioritization process: for the highway preservation program, which includes pavement management, structures preservation and other facilities preservation; and for the highway improvement program, which includes mobility improvements, safety improvements, economic initiatives and environmental retrofit.

WSDOT conducts a priority programming process in which the agency takes into consideration the extensive list of investment requirements. Some of this method is quantified in benefit-cost analysis. The preservation program is primarily prioritized using lowest life–cycle costs.

The investment decision process where WSDOT has program level or other discretionary funds, is as follows:

- WSDOT executives at headquarters use federal and state requirements to develop instructions to WSDOT regions.
- The regions develop project scopes based on these instructions and submit the projects to headquarters for evaluation.
- WSDOT uses the investment criteria in state law to make budget recommendations.
- Until the legislature changed the role of the WTC, WSDOT submitted its recommendations to the Transportation Commission, who submitted their recommendation to the legislature. WSDOT will now submit its recommendations to the Governor (Office of Financial Management).
- The Governor will submit the Transportation Budget to the legislature.

The 2005 Transportation Partnership Funding Package and the 2003 "Nickel" program have legislatively mandated projects named in the programs which fall outside this prioritization process. The Nickel funding authorized by the state is expected to result in about $4.2 billion worth of investments over the next ten years. The TPA funds are expected to yield about $7 billion worth of investments over the next 16 years. Given the scale of this investment level, TPAB has asked that investment criteria and planning for the next ten years be re-evaluated as a cost-saving measure.

Figure 1 on page 32 shows the state transportation investment process, based upon current transportation and related funing programs and sources. Figure 2 depicts the existing transportation planning system in Washington state.

3) Regional Investment Process

As noted above, federal law requires regional transportation plans. In Washington, the 1991 Growth Management Act enabled counties to form regional transportation planning organizations (RTPO) (*RCW 47.80*). Regional councils of government typically serve as the RTPO or MPO for their region. RTPOs must:

- Encompass at least one complete county.

Figure 1: Sources of Transportation Funding

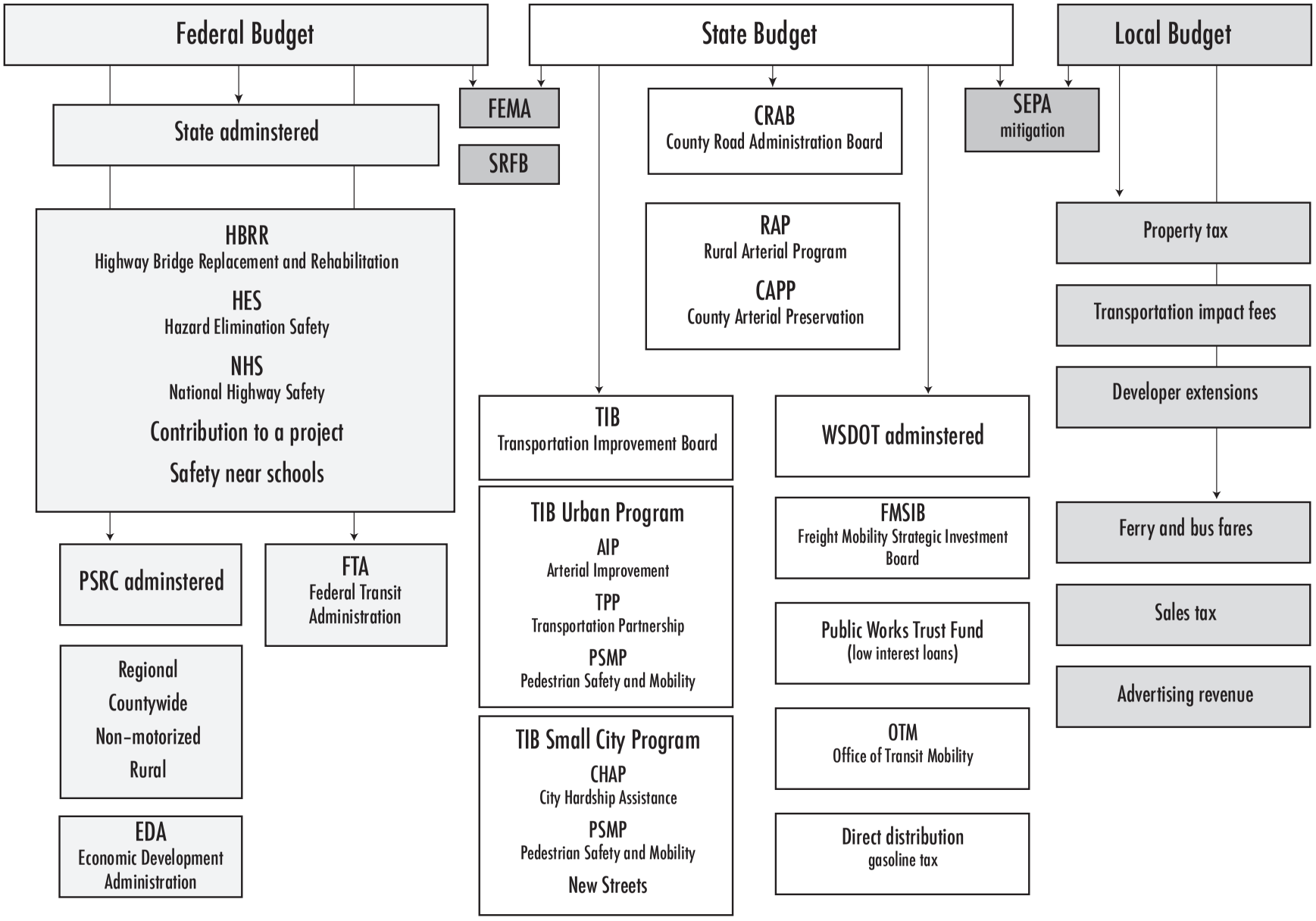
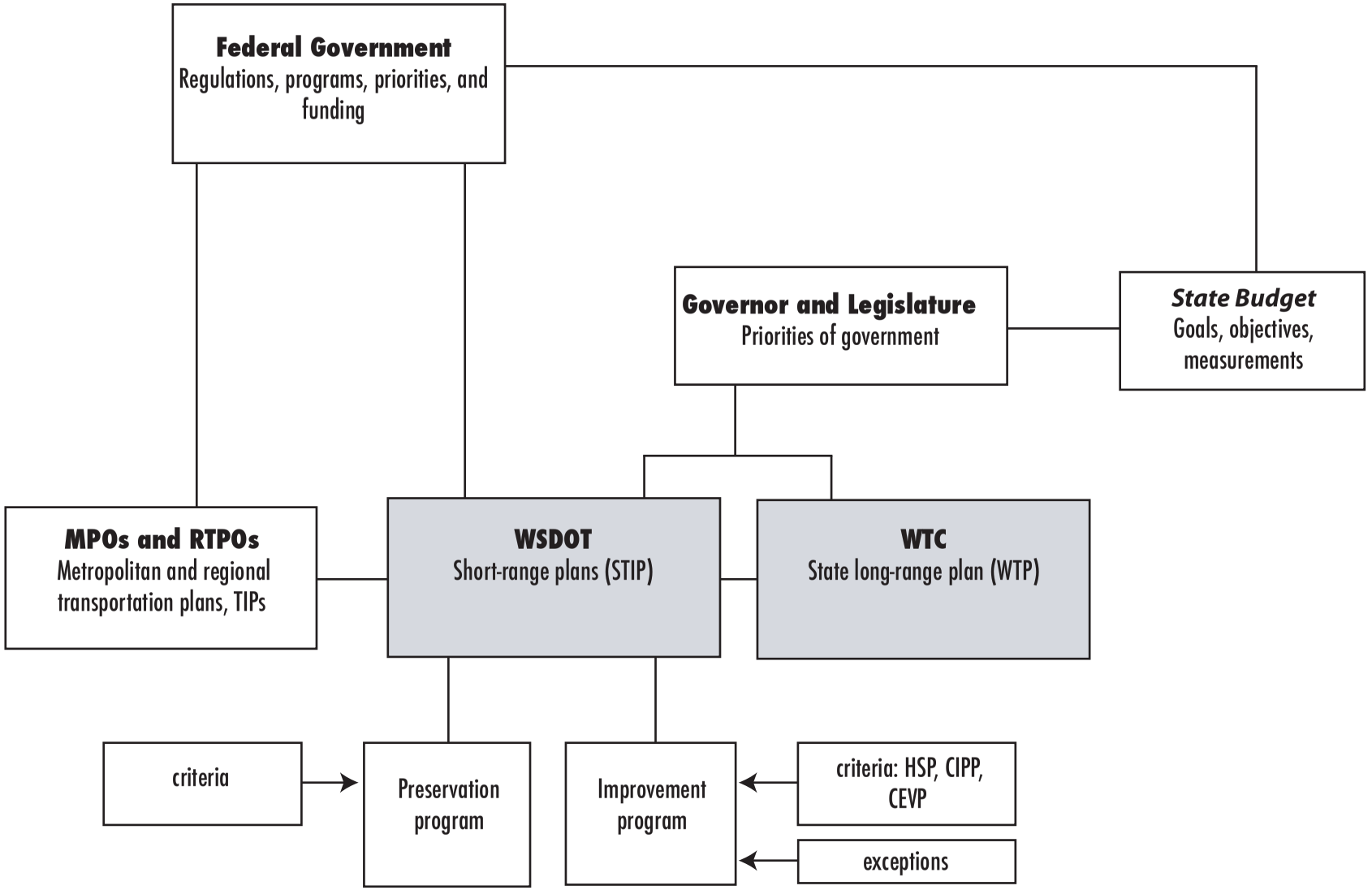


Figure 2: Existing Transportation Planning Process



Key: **TIP** (Transportation Improvement Program), **STIP** (State Transportation Improvement Program), **WTC** (Washington State Transportation Commission), **WTP** (Washington Transportation Plan), **HSP** (Highway Systems Plan), **CIPP** (Capital Improvement and Preservation Program), **CEVP** (Cost Estimate Validation Process)

- Have a population of at least 100,000 or contain a minimum of three counties.
- Have as members all counties within the region, and at least 60 percent of the cities and towns within the region, representing a minimum of 75 percent of the cities' and towns' population. (*Municipal Research & Services Center of Washington, "National, Statewide and Regional Transportation Planning," Oct. 2005*)

There are 11 MPOs and 14 RTPOs in Washington:

- Benton–Franklin Council of Governments: Benton, Franklin, Walla Walla counties.
- North Central RTPO: Chelan, Douglas, Okanogan counties, Wenatchee Valley Transportation Council.
- Northeast Washington RTPO: Ferry, Pend Oreille, Stevens counties.
- Palouse RTPO: Asotin, Columbia, Garfield, Whitman counties, Palouse Economic Development Council.
- Peninsula RTPO: Clallam, Jefferson, Kitsap, Mason counties.
- Puget Sound Regional Council: King, Kitsap, Pierce, Snohomish counties.
- Quad County: Lincoln, Grant, Adams, Kittitas counties.
- Skagit/Island RTPO: Skagit County Council of Governments.
- Southwest Washington Regional Transportation Council: Clark, Klickitat, Skamania counties.
- Southwest Washington RTPO: Cowlitz, Grays Harbor, Lewis, Pacific, Wahkiakum counties, Cowlitz-Wahkiakum Council of Governments.
- Spokane Regional Transportation Council: Spokane, Whitman counties.
- Thurston Regional Planning Council.
- Whatcom County Council of Governments.
- Yakima Valley Conference of Governments.

For more information on the MPO process, see *The Metropolitan Transportation Planning Process: Key Issues—A Briefing Notebook for Transportation Decisionmakers, Officials, and Staff, Transportation Planning Capacity Building Program* (FHWA and FTA), at http://www.planning.dot.gov/documents/BriefingBook/BBook.htm.

a. Regional Investment Criteria

See Appendix F for a complete description of the planning processes and criteria used by the regional councils in Washington State. For illustrative purposes, two regional councils are presented here: Puget Sound Regional Council and Skagit Council of Governments.

i. Example 1: Puget Sound Regional Council

Vision 2020 and *Destination 2030*:

Goals:

- Support maintenance and preservation of existing transportation infrastructure and services as a high priority.
- Provide stronger links between the transportation system and land use development to encourage growth within defined urban growth areas with balanced investments in multimodal transportation improvements.
- Identify and prioritize projects, programs and policies to improve all modes of transportation and keep up

with growth.

- Improve the region's financial capacity to fund needed investments.
- Tailor recommendations at the sub-regional and corridor levels, in recognition of the region's social, physical and cultural diversity.

Investment Priorities:

- The first priority should be to maintain, preserve, make safe, and optimize existing transportation infrastructure and services.
- Investments should emphasize continuity and complete discrete elements of the transportation system. Completing missing pieces of larger systems is a regional investment priority.
- Appropriate investments in all modes should be emphasized to provide an array of travel choices.
- Transportation investments should be directly linked with measurable transportation, environmental and land use outcomes, and should support the achievement of regional and state benchmarks.
- Cost effective transportation options to addressing identified problems should be demonstrated and implemented.
- Compact development of designated urban centers, high capacity transit station areas, and other communities should be supported through direct investment.

(*Puget Sound Regional Council, Destination 2030, March 2001, pp. 2, 27-29*)

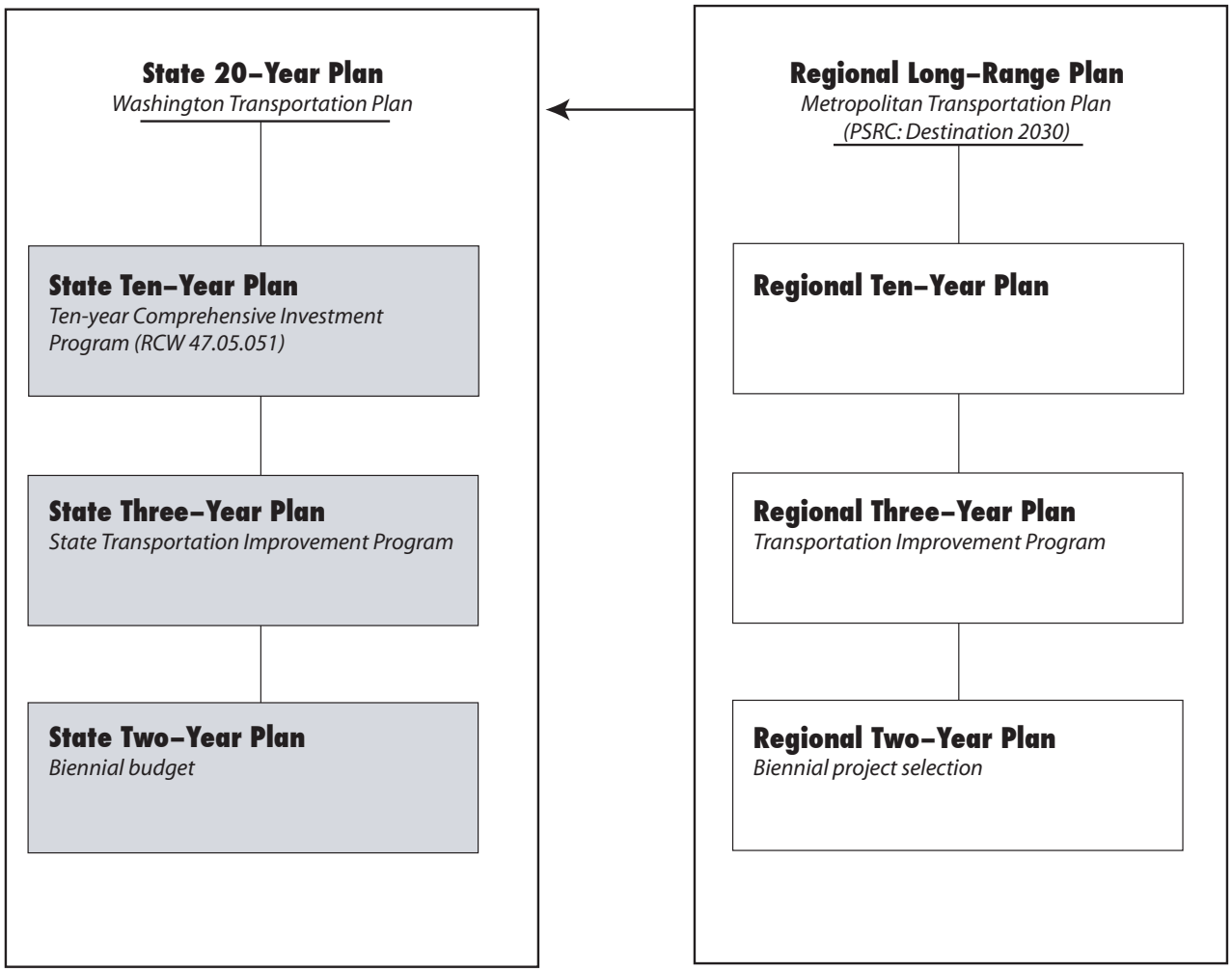
ii. Example 2: Skagit MPO and the Skagit Sub–RTP

Skagit Sub–RTP Policies:

- Efficiency and effectiveness: Identify, encourage and implement strategies and projects that will maximize the efficiency and effectiveness of the regional transportation system through a cooperative effort with member agencies, the Metropolitan Planning Organization, the public sector, and state and federal agencies.
- Regional significance: Provide a Sub–Regional Transportation Plan that identifies regionally significant transportation facilities and services that support local comprehensive plans, and ensures ongoing evaluation to keep current with local, metropolitan, inter–regional, state, federal and public needs and requirements.
- System integrity: Protect the integrity of the investment in the existing transportation system by encouraging timely maintenance.
- Cooperation: Facilitate cooperation and information exchange among stakeholders in the sub–region.
- Public involvement: Maintain and execute an ongoing public involvement program to ensure the early, meaningful and continuous participation of the citizens of Skagit County in the planning process.

(*Skagit Council of Governments, Skagit Metropolitan Transportation Plan/Sub-Regional Transportation Plan Update, 2005, pp. V-5 and V-6*)

Figure 3. Regional and State Planning Integration



b. Relation to State Planning

Federal requirements dictate that each state and MPO/RTPO have a long-range (20–year) and a short–range (three– to five–year) transportation plan. Washington state also requires a ten–year investment plan. Program budgets are set biennially for the state, and project level decisions by MPOs and RTPOs are also biennial. The short–range plans and budgets are intended to be more detailed subsets of the long-range plans. The MPO and RTPO plans are submitted to the governor. Figure 3 on the following page shows how the regional plans align with state transportation planning.

D. Current System and Objectives

Section I of this report outlined seven objectives for this study. This section shows how the current performance measurement system does or does not meet these objectives.

OBJECTIVE 1: Improve the use of performance measures for external accountability, communication and reporting.

Criterion 1a: Does the performance measure system allow conformance with the GASB suggested criteria for effective communication?

Partially, the recommendations conform with the Governmental Accounting Standards Board recommended 16 criteria in their special report, *Reporting Performance Information: Suggested Criteria for Effective Communication,* as outlined in the following table:

Table 6: GASB Criteria and Recommendations

GASB Criteria	Current Performance Measurement System Conformance with Criteria
Purpose and scope	The current system includes annual reporting on benchmarks in the Gray Notebook and additional reporting on many measures.
Statement of major goals and objectives	The current benchmarks and key measures are primarily focused on highways and, in particular, those highways in urban areas.
Involvement in establishing goals and objectives.	The goals and objectives are not aligned.
Multiple levels of reporting	There are multiple levels of reporting but there is not a consistent linkage through a tiered performance measurement system.
Analysis, results and challenges	Current Gray Notebook reports analyze results and challenges facing WSDOT.
Focus on key measures	WSDOT reports on many measures.
Reliable information	WSDOT has a strong track record of providing reliable information.
Relevant measures of results	WSDOT has relevant measures of results in many areas.
Resources used and efficiency	Some of the reported measures include cost information (i.e. capital project delivery within budget).
Citizen and customer perceptions	Customer satisfaction surveys are available and the results are occasionally available in the Gray Notebook.
Comparisons for assessing performance	Comparisons are available by tracking through issues of the Gray Notebook, which are indexed.
Factors affecting results	WSDOT reports on factors affecting results.
Aggregation and desegregation of information	WSDOT aggregates and disaggregates information in the Gray Notebook.
Consistency	The benchmarks are reported annually and some of the other performance measures are consistently reported. (See Appendix I for a complete list of reporting performance measures and dates of report.)
Easy to find, access and understand.	The Gray Notebook is complex and challenging for public readers.
Regular and timely reporting	Reporting is quarterly through the Gray Notebook.

Criterion 1b: Do the performance measures reflect available information about public interest in accountability?

Partial capital project reports relate to the on time and on-budget delivery of Nickel projects in the beige pages of the *Gray Notebook*.

OBJECTIVE 2: Relate the performance measures and investment criteria to the overarching performance goals of the state transportation system.

Criterion 2a: Is there stakeholder concurrence on identification of overarching performance goals?

No, there are differing performance goals in the Washington Transportation Plan, the 2003-07 Business Directions and the benchmarks.

Criterion 2b: Do the existing overarching performance goals allow WSDOT to report on key measures of accountability in a comprehensive, yet concise manner?

No, overarching goals have not been established for the state transportation system, therefore WSDOT is not able to link them.

Criterion 2c: Do the existing overarching performance goals encompass the array of significant WSDOT program goals and strategic plans?

No, overarching performance goals have not been established for the state transportation system. The adopted benchmarks are focused on highways and in particular urban highway performance.

OBJECTIVE 3: Distinguish between transportation system performance, state agencies' performance and WSDOT performance.

Criterion 3a: Does the existing measurement system lend itself to providing tiered information from the transportation system to the individual agency responsibility?

No, the benchmarks are not all within WSDOT's control and reporting on them does not distinguish between what WSDOT does and what other agencies are responsible for.

OBJECTIVE 4: Identify and consistently report on a few key accountability measures.

Criterion 4a: Can key measures be consistently tracked?

No, while the benchmarks are consistently tracked these are not related to established over-arching goals for the state transportation system.

OBJECTIVE 5: Clarify accountability measurement terminology by simplifying it and conforming to GMAP and POG programs.

Criterion 5a: Does the existing performance measurement system conform to GMAP and POG?

No, there is not common terminology. GMAP does not yet have a framework. As a consequence there is not a clear cross-walk between WSDOT's current reports and the GMAP program.

OBJECTIVE 6: Distinguish performance accountability measure reporting from organizational reporting.

Criterion 6a: Does the existing performance measurement system lend itself to a multi-layered reporting system linking the overarching performance goals of the state transportation system, WSDOT's key measures and on-going organizational reporting?

Partially, WSDOT measures include a mix of organizational reporting and performance reporting.

OBJECTIVE 7: Provide for evolution of performance measures.

Criterion 7a: Does the existing system describe the next steps in the evolution of performance measures and when they should be accomplished?

Partially, WSDOT is a leader in the development of measures in areas such as congestion. RCW 47.01.012 which establishes the nine benchmarks is overly detailed in establishing goals and targets.

Criterion 7b: Does the performance measurement system include a "new measures" component that will allow for integration of refinements in data collection and analysis of transportation systems?

Partially, the benchmarks are overly detailed.

OBJECTIVE 8: Make transportation investment criteria clear, with clearly stated goals and priorities.

Criterion 8a: Do the investment criteria derive from a simple set of instructions?

No, the consultants found 73 investment criteria that are, in general, not prioritized.

Criterion 8b: Do the investment criteria relate to the overarching performance goals of the state transportation system?

No, the current investment criteria are not aligned with the Washington State Transportation Plan or 2003-07 Business Directions.

IV. Best Practices

A. Performance Measurement in Other States

1) States Reviewed

Performance measurement in the following ten states that were either listed in WSDOT's *State of the Practice Inventory March 2004: Learning from Others* or were suggested by TPAB were reviewed:

- Florida Department of Transportation
- Kentucky Transportation Cabinet
- Maryland Department of Transportation
- Michigan Department of Transportation
- Minnesota Department of Transportation
- Missouri Department of Transportation
- New Mexico Department of Transportation
- Ohio Department of Transportation
- Oregon Department of Transportation
- Virginia Department of Transportation

To understand the context within which these states use performance measurement, the consultants examined the state laws affecting state transportation planning and performance measurement; the state transportation plans; the department's mission and goal statements; and the state's performance measures. The consultants also reviewed the external performance measurement reports of each state. A summary of findings for each state, summaries of the state's performance measurement reports and a state comparison chart can be found in Appendix G.

2) Summary of Best Practices

From the review of these ten states, the consultants concluded that the best practices for performance measurement are as follows:

- Establishing an overarching set of three to four performance goals for the state transportation system.
- Establishing the overarching performance goals in the state long-range transportation plan and using these goals to frame the investment plan, operating budget priorities, external reporting and performance measurement.
- A systematic identification of focus areas, strategies or objectives that link the overarching performance goals to performance measures.
- Distinguishing the transportation department's performance from the performance of the transportation system.

- Establishing a limited number (20 to 30) of key performance measures that are used for external accountability. There are additional measures used for internal management.
- Utilizing effectiveness and customer satisfaction measures for external reporting along with limited use of efficiency measures.
- Providing easily digested and readable reports for external audiences.
- Having state laws that allow for the evolution of performance measures.
- Providing a "crosswalk" to the statewide performance measurement system.

3) Overarching Performance Goals

Most of the states identify three or four overarching performance goals for the state transportation system. (These goals are sometimes referred to as strategic directions.) The goals encompass the following areas in differing combinations:

- Safety and security.
- Preservation of existing systems.
- Capacity increases.
- Movement of goods and people.
- Efficient use of resources/organizational excellence.
- Quality of life.
- Economic prosperity.

While the way in which the goals are expressed or combined to form overarching goals varies from state to state, there is remarkable similarity in the areas covered. For example, Minnesota, Florida and Michigan each have three goals that encompass the same broad areas. Oregon, Maryland and New Mexico each have four goals that are similar to each other and to Minnesota's, Florida's and Michigan's.

These states' goals are shown in the table below:

Table 7: Sample State Goals

	Minnesota	Florida	Michigan	Oregon	Maryland	New Mexico
1	Safeguard what exists	Preserve and manage a safe, efficient transportation system	Preservation	Improve safety	Efficiency: maximize the effectiveness of existing systems	Deliver safe and secure multimodal programs and transportation infrastructure
2	Make the network operate better	Enhance Florida's economic competitiveness, quality of life and transportation system	Safety	Move people and goods efficiently	Mobility: provide critical new system additions	Expand and maintain a safe highway and transportation system

	Minnesota	Florida	Michigan	Oregon	Maryland	New Mexico
3	Make MN/ DOT work better	Organizational excellence	Mobility	Improve Oregon's livability and economic prosperity	Safety and security: customer and workforce safety and enhance system security	Provide efficient and effective management of government resources
4	—	—	—	Excellent customer service	Productivity and quality: improve program and project delivery	A great place to work

4) State Transportation Plan Framework

All states are required by federal law to adopt a 20–year transportation plan, with some states using a longer planning period. In several of the states reviewed, the state long-range transportation plan establishes overarching performance goals that provide a framework for shorter-term planning efforts, including six– or ten–year investment plans, biennial budgets and performance reporting.

Maryland, for example, is required by state law to develop a 20–year Maryland Transportation Plan that is to be revised every five years (in practice it is updated annually); a six–year Consolidated Transportation Program that includes a statement of operating costs, program priorities and capital projects that is to be updated annually; and an annual report "on the attainment of goals and benchmarks for the approved Maryland Transportation Plan, and the approved and proposed Consolidated Transportation Program." (Section 2-103.1) The annual attainment report is to include: "the establishment of certain measurable performance indicators or benchmarks, in priority funding areas at a minimum, designed to quantify the goals and objectives specified in the Maryland Transportation Plan" and "the degree to which the projects and programs contained in the approved Maryland Transportation Plan and Consolidated Transportation Program attain those goals and benchmarks as measured by the performance indicators or benchmarks." (Section 2-103.1)

Florida state law requires a 20–year plan with five–year updates with an annual performance report. The plan is to consider projects or strategies that support seven policy areas. (339.155) These seven policies are collapsed into the three goals that are reported on in the annual reports on performance: *2004–05 Short-Range Component and Annual Performance Report: The Department's Strategic Plan for Accomplishing the Goals and Objectives of the 2020 Florida Transportation Plan*.

Minnesota and Ohio used their strategic plans or business plans in updating their state transportation plan so that the goals aligned between the long–range and shorter term plans and with their performance measures. Minnesota's Statewide Transportation Plan contains policies to implement the strategic directions established in the 2003 Strategic Plan. *Access Ohio*, the 30–year transportation plan for the State of Ohio, affirmed the goals established in the Ohio Department of Transportation Business Plan for Fiscal Year 2006-07, adopting the same five goals as the Business Plan.

5) Links Between State Transportation Plan, Performance Goals and Measures

The overarching performance goals established in the State Transportation Plan provide a framework for performance measures. In most states there are intervening steps between the goals and the measures. These may be expressed as objectives, strategies or focus areas. They serve as a logic trail from the overarching goals to the performance measures.

Maryland's framework linking goals and strategies in their Annual Attainment Report (p. 11) is outlined below with an example of a preservation related measure:

Table 8: Maryland Example: Performance Measure Linked to Performance Goals

Goal	Efficiency: Maximize the effectiveness of existing systems
Policy Objectives (one of two)	Extend the useful life of existing facilities and equipment
Performance Measure (one of six)	Percent of SHA-maintained roads with acceptable ride quality
Why Performance Changed	Increased traffic volumes, particularly tractor-trailer Pavement resurface program to identify best allocation of funds
Future Strategies	Ensure increased funding Adopt new business strategies – i.e., road quality specs in contracts

Florida's framework linking goals and measures in their short-term Component Report (pp. 14-15) is outlined below with a performance measure similar to Maryland's.

Table 9: Florida Example: Performance Measure Linked to Performance Goals

Strategic Goal	Preserve and manage a safe, efficient transportation system
Focus Areas (one of two)	System preservation
Strategies (one of three)	Resurface 2,200 lane miles annually and resurface 5.8% of the SHS annually in FY 02-03, increasing to 5.9% in FY 05-06.
Measures of Effectiveness (one of seven)	Percent of interstate pavement meeting Department standards

The State of New Mexico's Department of Finance guidelines to performance-based budgeting, depicted in the graphic below, show how New Mexico's agencies construct the relationships between strategic plans and performance measures and targets.

Table 10: New Mexico Example: Performance–Based Budgeting

Agency Mission	Goals	Objectives/Tasks	Performance Measures	Tracking, Analysis and Reporting
What is being done, why, and for whom?	What are the general ends embodied in this mission?	What are the expected results?	What are some measures that gauge the degree of success?	Are goals and objectives being achieved?
Definition: concise statement of the unique, fundamental current and future public purposes of the agency and its programs.	**Definition:** statements of outcome for department programs.	**Definition:** measurable targets that describe the end results that a service or program is expected to accomplish in a given time period.	**Definition:** quantitative or qualitative inidcators of the extent to which objectives are being achieved.	**Definition:** tracking, evaluating, and reporting on performance and using the information to improve.

6) Distinguish State Department of Transportation Performance

Some of the states distinguish between the scope of the long–range transportation plan and the responsibilities of the department of transportation.

Minnesota, for example, notes that Minnesota Department of Transportation (MN/DOT) has a varying degree of control or influence over individual performance measures. The level of influence that the department had over a particular measure affected the target that was eventually set, with only those performance measure targets established that the Department had control over. (*MN/DOT Long Range Transportation Plan, Chapter 6*) For each policy goal in their transportation plan, Minnesota, in addition to discussing the MN/DOT's performance measures, reviews policy directions, policy strategies and coordination, and partnerships with other agencies.

Florida notes at the beginning of their 2020 plan that it is "a plan for all of Florida, not just the Florida Department of Transportation. By establishing the strategic goals, short-range objectives and strategies identified in the Short-Range Component—and by encouraging our partners to join us in pursuing the long-range goals and objectives in the Florida Transportation Plan—the Department has taken the lead in setting the course for Florida's 21st century transportation system." (*2025 FTP p.1*)

7) Key Performance Measures

While some states identified a great number of performance measures (e.g., Missouri has eight goals and 18 tangible results, and for each tangible result has from four to seventeen performance measures), most have between 20 and 30 measures.

Michigan has 14 performance measures that correspond to ten policies that support three goals of preservation, safety and mobility. Virginia has 28 measures in the Virginia Transportation Plan, while Florida has 20 measures in its Short-Range Component Report, and Maryland has 25 in its Annual Attainment Report.

8) Use of Effectiveness, Efficiency and Customer Satisfaction Measures

The states use a variety of measures, which can generally be categorized as measures of:

- Effectiveness: an ends–oriented concept that measures the degree to which predetermined goals and objectives for a particular activity or program are achieved.
- Efficiency: an output or outcome relative to a unit of time, money or other input.
- Customer satisfaction: usually measured by surveys.

(Definitions from GASB Performance Measure Glossary)

More than one type of measure may be applied to a particular performance area. For example, Oregon has nine safety-related measures including effectiveness measures (i.e., fatalities per 100 million VMT) and a customer satisfaction measure (% of public satisfied with transportation safety). The most common key performance measures for external reporting are effectiveness measures, with the second most being common customer satisfaction measures. Many internal measurements are efficiency measures.

9) External Reporting for the Public

Two of the states reviewed (Michigan and Minnesota) do not provide a regular report on their performance measures; the other eight do. They range from a two-page Quarterly Report Card in Virginia to a 127-page quarterly *Good to Great Report* in New Mexico. Virginia also has a dashboard web report that provides information on engi-

neering, construction, maintenance, environment and safety, using red, green and yellow lights indicating problems, good progress and troubled status.

The two most easily understood reports, in the opinion of the consultants, and those most in conformance with GASB criteria for effective external communications, were Maryland's and Florida's. In 33 pages, Maryland's Attainment report provides information on the state of the transportation system, on key goals, objectives and performance measures, and on the MTD's finances.

The state law in Florida requires that the Florida Transportation Plan be "designed so as to be easily read and understood by the general public." (339.155) The Short-Term Component Report is longer than Maryland's Attainment Report at 69 pages but is well laid out and easily understood. Florida explains why transportation programs are important. For example: "It is important to keep pavement in good shape. When roadway surfaces are not maintained, the roadway must be rebuilt—literally—from the ground up. It is more economical to systematically maintain roadways than to rebuild them. Ride quality is what the motorist experiences (the smoothness of the ride). It directly affects motor vehicle operating costs. Wheel-path ruts or rutting are depressions in pavement caused by water, creating a safety hazard." (p. 15)

10) Evolution of Performance Measures

Florida sets three measures in state law (80% of pavement meets department standards; 90% of bridges meet department standards and 100% acceptable maintenance standard). (334.046) Most of the other states' laws provide policy guidance, but no direct measures.

Maryland law establishes four areas in which measurable transportation indicators are to be developed and reported. These include: increase in total trips for each of type of transit; high occupancy auto; pedestrian and bicycle modes of travel; and traffic congestion as determined by the Department, and any other performance goals established by the Department for reducing automobile traffic and increasing the use of non-auto traffic. (Section 2-103.1) This provides a way for the legislature to provide direction, and for performance measures to evolve since they are not codified.

New Mexico's Accountability in Government law (NMSA 6-3A) requires each state agency to annually submit to the legislative finance committee and finance division performance measures with the outputs produced by each program, the outcomes resulting from each program and baseline data associated with each agency's performance measures. The budget subsequently submitted is to include for each approved program a summary including the outputs and outcomes; performance measures and performance targets; and an evaluation of performance.

11) Relationship to Statewide Performance Measurement Programs

Oregon's Annual Performance Progress Report links the Oregon Department of Transportation's performance on key measures to the Oregon benchmarks. The report is structured as an internal government report using a statewide reporting format.

The Oregon Progress Board oversees the Oregon Department of Administrative Services implementation of the performance measurement program. Their Performance Measure Guidelines for Oregon State Agencies August 2004 provides directions for state agencies to link their performance measures to the Oregon benchmarks. The report notes: "Not all key (agency) performance measures will link to Oregon Benchmarks." (p. C-13) It also states that agencies should not, in general, use societal well-being measures as their key measures, noting that: "Agencies are responsible for creating linked performance measures that logically impact the benchmark trend." (p. C-7)

B. Best Practices for Investment Process and Criteria

1) Prioritization

The Blue Ribbon Commission on Transportation in its study of the Washington state transportation system evaluated best practices and recommended the state make investments with system performance as a goal. They set system performance goals by recommending benchmarks. Their investment priorities included:

- *Funding system maintenance and preservation throughout the state.*

This recommendation included a focus on using pavement management systems and lowest life–cycle cost methods.

- *Optimizing the current system using technology and the most cost–effective demand management techniques such as telecommuting and commute trip reduction tax credits.*

This recommendation focused on transportation system management and intelligent transportation systems. Other elements of this investment strategy included congestion pricing and linkage between land use plans and transportation.

- *Funding cost–effective system expansions in all modes.*

This recommendation focused on using tools such as cost–benefit analysis as well as travel demand modeling tools to enhance decision-making.

2) Qualities of an Effective Investment Process

The Blue Ribbon Commission provided the following guidance as to the qualities of an effective investment process:

- The decision–making is transparent.
- Investments are consistent with overarching goals.
- Performance measures provide information that gauge investment progress.
- Flexibility exists to adapt to changing needs.
- Data and information technology inform decision-making.
- There is a feedback process whereby investment recommendations, performance measures, and budgets are calibrated after legislative adoption.

V. Recommendations

A. Performance Measurement Recommendations

The performance measurement recommendations are intended to meet the objectives discussed in Section I and to reflect the best practices from other states by linking the overarching performance goals of the state transportation system to WSDOT's performance measures. Such linkage has been recommended by TPAB and is contemplated in RCW 43.88 and in the statewide GMAP and POG programs. A tiered approach to performance measurement is recommended that uses common terminology, has three overarching performance goals, three to five objectives for each goal, system measures for each objective, less than thirty key WSDOT measures and WSDOT established targets for each key measure.

A summary of the proposed goals, objectives and performance measures showing their relationship to the POG is on pages 50-51.

1) Goals and Performance Measures

The consultant's concluded in their review of best practices in other states that the most effective systems included establishing overarching goals for the state transportation system that are used to frame investment planning, operating budget priorities, external reporting and performance measurement. Additionally these states have systematically identified focus areas, strategies or objectives that link the overarching performance goals to performance measures.

In Washington state the benchmarks adopted in RCW 47.01.012 are not linked to the goals in the Washington State Transportation Plan nor to the 2003-07 Business Directions. As discussed in Section II, in the Sept. 30, 2005 *Gray Notebook*, WSDOT includes an article on linking measures to strategic objectives that align the 2003-07 Business Directions strategic objectives with key performance measures identified by the Department. The Transportation Benchmarks in RCW 47.01.012 are not linked to the WTP transportation system goals nor are they linked to the Business Directions strategic objectives.[7]

Linking performance measures to the goals of the transportation system has been recommended by TPAB and is contemplated by the statewide GMAP and POG processes and RCW 43.88.

TPAB recommended in January 2005 that the current edition of the Washington State Transportation Plan be used to: (1) organize all potential mandates as stated in various pieces of transportation legislation and connect them to the legislatively mandated benchmark categories; (2) review, adjust and improve the benchmarks; and (3) communicate the results as the overarching performance goals of the Washington state transportation system.[8]

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7. *Linking Measures to Strategic Objectives: Measures, Markers and Milestones,* WSDOT Gray Notebook, September 30, 2005.

8. Doug Hurley, transmittal letter accompanying report, *Department of Transportation Highways and Ferries Program Performance Measure Review*, January 27, 2005, p. 6.

GMAP and POG link WSDOT's performance measures and goals with the larger state goals, using a system identifying outputs, immediate outcomes, intermediate outcomes and ultimate outcomes. RCW 43.88 requires all state agencies:

- To define their mission and establish measurable goals for achieving desirable results.
- To develop clear strategies and timelines to achieve these goals.
- For the purpose of assessing activity performance, establish quality and productivity objectives for each major activity.
- Objectives must be expressed to the extent practicable in outcome-based, objective, and measurable form.
- Objectives must specifically address the statutory purpose or intent of the program or activity, and focus on data that measure whether the agency is achieving or making progress toward the purpose of the activity and toward statewide priorities.
- Adopt procedures for and perform continuous self-assessment of each activity, using the mission, goals, objectives, and measurements.
- The assessment of the activity must also include an evaluation of major information technology systems or projects that may assist the agency in achieving or making progress toward the activity purpose and statewide priorities.

Consistent with the requirements of RCW 43.88, TPAB's recommendations, and WSDOT's efforts to align their strategic goals and performance measures, the following tiered approach to performance measurement is recommended to replace the existing benchmarks. It is recommended that the legislature adopt the goals, with the department establishing the objectives, measures and targets.

- **Use common terminology:** As noted by the Oregon Progress Board, "using common language is critical."[9] Neither POG nor GMAP has yet established a glossary for statewide performance measurement. A draft glossary is attached in Appendix H based on performance measurement definitions in the Oregon Progress Board Guidelines and by the Governmental Accounting Standards Board.[10]
- **Three overarching performance goals:** As noted in the section on best practices, most states identify three or four overarching performance goals that frame planning, budgeting, investment decisions and performance measurement. (Goals are defined as broad statements of desired results, or the condition or state that one is striving to achieve. goals are usually long–term and may be beyond what might reasonably be expected to be achieved. See draft glossary.)
- **Three to five objectives for each performance goal:** Other states link their overarching performance goals with performance measures through strategies, objectives or statements of desired outcomes. Consistent with RCW 43.88 these are proposed to be expressed as objectives under each goal, with three to five such objectives for each. (An objective is defined as a statement of the condition or state one expects to achieve. An objective should be realistic, measurable, generally within the control of the organization, and time constrained. See draft glossary.)
- **System performance measures/ultimate outcome:** For each performance goal a measure of system success or of the ultimate outcome should be established. These measures will gauge progress toward the overall system goal, to which WSDOT may only partially contribute. (An ultimate outcome is defined as an end objective, or the end result that is desired or anticipated. See draft glossary.)

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9. Oregon Progress Board, *Performance Measure Guidelines for Oregon State Agencies*, March 2004, corrected August 2004. p. C-5.

10. ibid., pp. C 22– C 24, and www.gasb.org.

- **Thirty or fewer key performance measures:** Key measures should:
  - o Gauge progress toward achieving agency goals and pertinent POG goals.
  - o Focus on key indicators of success.
  - o Have targets.
  - o Have data that is accurate and reliable.
  - o Link to specific organizational units.
  - o Include customer satisfaction indicators.
  - o Allow comparisons with others whenever possible.[11]

(A key measures is defined as a measure of the essential results or objectives of an organization, program or service. Also, a performance measure, shared with the legislature and the public, that shows how the agency is achieving its goals and objectives. As a whole, these measures adequately represent the full scope of an agency's roles and responsibilities. See draft glossary.)

- **Targets:** Targets for the key performance measures should be set by WSDOT. (A targetis defined as the desired level of an output or outcome measure at a specific point in time. See draft glossary.)

11. ibid., pp. C7–C9.

Table 11: Proposed WSDOT Goals, Objectives, and Key Measures

Priority of Govt.	Goal	Objectives/System Measures	WSDOT Major Activities	WSDOT Key Measure Area	WSDOT Potential Measure	WSDOT Target
To improve the security of people and property	To improve the safety and security of transportation customers & system.	**Highway Hazard Reduction** •System measure: Vehicular accidents (deaths/ VMT)	•Highway maintenance •Safety capital projects	1. Safety improvement project delivery 2. Effectiveness of safety projects 3. Vehicular accidents	1. Number of TPA HAL projects completed 2. Before and after combined average for safety projects collisions/year 3. Highway related deaths, natural and engineering–related (per VMT)	
		Bridge Hazard Reduction •System measure: Seismic retrofit status all bridges	•Bridge maintenance •Capital projects	4. Bridge seismic retrofit program status 5. Bridge seismic status WSDOT bridges	4. Planned vs. actual number of projects advertised in high risk zone 5. Percent of bridges meeting WSDOT seismic standards	To be determined
		WSF Security & Safety •System measure: Safety plan compliance	•Safety plan •Compliance with MTSA	6. Safety plan compliance	6. Results of internal safety audits	
		Emergency Mgmt •System measure: CEMP readiness	•CEMP role •JOPS	7. CEMP preparedness	7. Status of joint WSP/WSDOT measure development	
To improve statewide mobility of people, goods, information & energy.	To improve the predictable movement of people and goods.	**Efficient Use of Highways—Urban Areas** • System measure: Change in the 95% reliable travel time on key corridors	•Demand management •Traffic operations •Capital projects	8. Effectiveness of highway projects in relieving congestion 9. Effectiveness of traffic operations and demand management or cost per throughput	8. Before and after congestion results: case studies 9. TBD (e.g., change in person throughput per lane during peak periods)	
		Efficient Use of Highways—Statewide •System measure: Throughput on all state highways	•Maintenance •Snow & ice •Incident Response	10. Maintenance quality 11. Avalanche control 12. Incident response	10. Number of WSDOT's 22 maintenance targets achieved 11. Closure times: 1-90, Snoqualmie Pass 12. Average number of minutes to clear incidents that last over 90 minutes	

Priority of Govt.	Goal	Objectives/System Measures	WSDOT Major Activities	WSDOT Key Measure Area	WSDOT Potential Measure	WSDOT Target
		WSF Operations •System measure: Capital asset development to meet 5, 10 and 15 year load projections	•Operations •Maintenance •Capital projects	13. Trip reliability 14. Customer satisfaction/affordability	13. Trip reliability index 14. Customer survey results	
		Transit Ridership •System measure: % of transit seats utilized	•ACCT •Grants	15. Disadvantaged ridership 16. Non–urban area access to transit	15. TBD (e.g. # of one–way trips provided for transportation disadvantaged) 16. TBD (e.g. annual public transit ridership in rural areas)	
To improve statewide mobility of people, goods, information & energy.	To be effective managers of transportation assets and public resources.	**Preservation** •System measure: Achievement of optimal life cycle % on all transportation assets	•Pavement paving •Bridge repairs & preservation •Ferry terminal preservation •Ferry vessel preservation	17. Pavement condition 18. Bridge condition 19. Ferry preservation	17. Percent of pavement in good, fair or poor condition vs. optimal life cycle % rating 18. Percent of bridges in good, fair or poor condition vs. optimal life cycle % rating 19. Life cycle rating for vessels vs. optimal life cycle rating	To be determined
		Capital Project Quality & Delivery •System measure: Project status and quality of construction	•Capital projects	20. On-time/on-budget highway project status 21. On-time/on-budget ferry project status 22. Construction quality 23. Reasonableness of mitigation undertaking and costs	20. Percent of highway projects complete on schedule and budget 21. Percent of ferry projects complete on schedule and budget 22. Quality rating system to be developed 23. TBD (e.g., costs of mitigation in relation to project objectives)	
		Environmental Management • System measure: Transportation system adherence to environmental regulations	•Capital project environmental compliance •Operations environmental compliance	24. Environmental compliance	24. Number of projects in compliance	
		Workforce Management •System measure: Employee satisfaction	•Human resources management	25. Skill level of project managers and engineering staff 26. Workforce safety	25. TBD (e.g., percent of project managers and engineering staff with skills that meet WSDOT needs) 26. Recordable injuries per 100 workers	

2) Recommended Performance Goals

Based on discussions with WSDOT, TPAB and other stakeholders WSDOT's current eighteen goals are proposed to be combined into three broad areas:

1. Safety and security.
2. Moving goods and people predictably.
3. Effectively manage transportation assets and public resources.

Performance goals for WSDOT have been established in the Washington State Transportation Plan 2003-2022; in the Business Directions 2003-07; and in RCW 47.01.012.

Table 12: WSDOT Current Goals

WTP 2003-22	RCW 47.01.012	Business Directions
System operations and maintenance		Maintain and operate system cost effectively
System preservation	No interstate highways, state routes, and local arterials shall be in poor condition	Plan and build capital investment projects
Special needs		
Congestion relief	• Traffic congestion on urban state highways shall be significantly reduced and be no worse than the national mean • Delay per driver shall be significantly reduced and no worse than the national mean	
Increased travel options	• Per capita vehicle miles traveled shall be maintained at 2000 levels • The non–auto share of commuter trips shall be increased in urban areas • The state's public transit agencies shall achieve the median cost per vehicle revenue hour of peer transit agencies, adjusting for the regional cost of living.	
Seamless connections		
Continuously reduce injuries, fatalities	Safety	
Increased security	No bridges shall be structurally deficient, and safety retrofits shall be performed on those state bridges at the highest seismic risk levels	Optimize operational efficiency and safety
Effective community-based design		
Collaborative decisions		Support WTC in preparing budgets and plans
Competitive freight movement		
Support economy		
Support tourism		
Meet air standards		

WTP 2003-22	RCW 47.01.012	Business Directions
Meet water standards		
Maintain habitat		
Reuse and recycle		
	Administrative costs as a percentage of transportation spending shall achieve the most efficient quartile nationally	• Assure the capability and efficiency of workforce • Performance reporting

These can be combined into the proposed three overarching performance goal areas as shown below:

Table 13: Proposed WSDOT Goals

Safety & Security	Moving Goods & People Predictably	Effective Managers
Continuously reduce fatalities, etc.	System operations and maintenance	System preservation
Increased security	Special needs	Effective design
Optimize safety	Congestion relief	Collaborative decisions
Safety retrofits on bridges	Increased travel options	Meet air standards
	Seamless connections	Meet water standards
	Competitive freight movement	Maintain habitat and watershed
	Support economy	Reuse and recycle
	Support tourism	Administrative costs
		Workforce
		Performance reporting
		Support WTC
		Capital projects

a. Goal One: Safety and Security

1) Current goals and measures

WSDOT has safety responsibility in four major activity areas—highways, bridges, Washington State Ferries and emergency management—with plans and goals in each area. Current key measures, either identified in the Sept. 2005 issue of the **Gray Notebook** or benchmarks mandated by RCW 47.01.012, are all related to highway safety.

A full review of WSDOT's safety and security related goals and plans, current benchmarks and key and other measures is in Appendix I with other states' measures.[12]

12. Other states also use the same measures as WSDOT. These are not listed in the appendix.

Table 14: WSDOT Current Safety and Security Measures

Program	State Plans/Goals	Benchmarks/ Key Measures	Categories Measured	Measures Used in Other States
Highways	• 2005 Transportation Partnership Program • Joint Operations Policy Statement • WA. Transportation Plan • State Highway Plan • Target Zero	**Gray Notebook Sept. 05** • Fatality rate (bicyclist, pedestrian, vehicle) • Before and after collision analysis for safety projects • RCW 47.01.012 • Safety	• 2005 TPA project results • Highway capital projects • Vehicular safety • Incident response • Bicyclist safety • Pedestrian safety • Rest area safety • Park & ride lot security	• Customer satisfaction
Bridges	• 2005 Transportation Partnership Program		• Seismic bridge retrofit	
WSF	• Security Guide • Joint Operations Policy Statement • WSF Security Plan • WSF Progress Report • WA. Transportation Plan			
Emergency Mgmt.	• Joint Operations Policy Statement • Washington State Comprehensive Emergency Mgmt. Plan			

ii. Proposed measures

To improve compliance with RCW 43.88, which requires performance measurement in all major activities, and to reflect the importance of the other areas for which WSDOT has safety responsibilities, it is proposed that WSDOT develop key measures for bridge safety, Washington State Ferry security and emergency management.

Most of the proposed key measures are already used by the WSDOT, with the exception of ferry safety and security and emergency management where WSDOT has not published performance measures.

Table 15: Proposed Safety Performance Measures

POG	Goal	Objective/System Measure	WSDOT Major Activities	WSDOT Key Measure Area	WSDOT Potential Measure	WSDOT Target
To improve the security of people and property	To improve the safety and security of transportation customers and system	Highway hazard reduction Measure: Vehicular accidents (deaths/VMT)	• Highway maintenance • Safety capital projects	• Safety improvement project delivery • Effectiveness of safety projects • Vehicular accidents	• Number of TPA HAL projects completed • Before and after combined average for safety projects collisions/year • Highway related deaths: natural and engineering related (per VMT)	
	Bridge Safety Measure: Seismic retrofit status all bridges		• Bridge maintenance • Capital projects	• Bridge seismic retrofit program status • Status of high impact projects	• Planned vs. actual number of projects advertised in high risk zone • Percent of bridges meeting WSDOT seismic standards	
		WSF security and safety Measure: Safety plan compliance	• Safety plan • Compliance with MTSA	• Safety plan compliance *	• Result of internal safety audits	
		Emergency Mgmt. Measure: CEMP readiness	• CEMP role • JOPS	• CEMP preparedness *	• Status of joint WSP/WSDOT measure development	

*New key measure area

b) Goal Two: Moving People and Goods Predictably

i. Current goals and measures

WSDOT responsibility for moving people and goods predictably falls into three major activity areas—highways, Washington State Ferries (WSF), and transit—with plans and goals in each area. Current key measures, as either identified in the Sept. 2005 issue of the *Gray Notebook* or benchmarks mandated by RCW 47.01.012, are primarily related to highways, and in particular to congestion relief in urban areas. On-time performance is the only key measure identified for WSF. Two benchmarks have been established for transit, one relating to increasing the non-auto share of commuter trips, and the other to public transit agencies' achieving the national median cost per vehicle revenue hour of peer transit agencies. WSDOT has little to no role to play in either of these transit measures.

A full review of WSDOT's mobility related goals and plans, current benchmarks and key and other measures is in Appendix I with other states' measures.[13]

13. Other states also use the same measures as WSDOT. These are not listed in the appendix.

Table 16: WSDOT Current Movement of Goods and People Measures

Program	State Plans/Goals	Benchmarks/ Key Measures	Categories Measured	Measures Used in Other States
Highways	• 2005 Transportation Partnership Program. • Washington Transportation Plan • State Highway Plan	**Gray Notebook Sept. 05** • MAP targets: rating for 22 highway maintenance activities • Congestion: Peak travel time for key commute routes: percent of change in travel time performance for 22 Puget Sound routes • Average number of minutes to clear incidents that last over 90 minutes **RCW 47.01.012** • Traffic congestion on urban state highways shall be significantly reduced and be no worse than the national mean • Delay per driver shall be significantly reduced and no worse than the national mean • Per capita vehicle miles traveled shall be maintained at 2000 levels • The non-auto share of commuter trips shall be increased in urban areas	• 2005 TPP project results • Maintenance Accountability Process (MAP) • Maintenance • Annual vehicle miles traveled • Travel times • Delay per drive • Avalanche control • Snow and ice removal • Delay & congestion • Commuter options • Travel information • Trucks, goods and freight • Signal re-timing	System operations
WSF	• Ten–year Passenger Strategy for Washington's Multimodal Ferry Transportation System (Jan. 2005) • Update of Ferry Strategic Plan 2005 • New Vessel Program • WSF Progress Report 2003	**Gray Notebook Sept. 05** • On-time performance	• Customer service • Trip reliability • On-time performance • Ridership and farebox revenues • Ferry capital program	
Transit	• Agency Council on Coordinated Transportation 2003-04 Report to the Legislature • Public Transportation and Intercity Rail Passenger Plan for Washington State 1997-2016 • Washington State Transportation Plan	**RCW 47.01.012** • The state's public transit agencies shall achieve the median cost per vehicle revenue hour of peer transit agencies, adjusting for the regional cost-of-living	Transit efficiency	Transit service

ii. Proposed measures

To improve compliance with RCW 43.88, which requires performance measurement in all major activities, and to reflect the importance of the other areas for which WSDOT has responsibility for the predictable movement of goods and people, it is proposed that WSDOT consider developing additional key measures for: WSF; a broader range of highway responsibilities; and non-urban concerns.

Most of the proposed key measures are already in use by WSDOT. It is recommended that WSDOT develop a measure of the effectiveness of its traffic operations and demand management programs. WSDOT does not currently report on disadvantaged resident or non-urban use of public transit, both of which are recommended below.

Table 17: Proposed Movement of People and Goods Measures

POG	Goal	Objective/ System Measure	WSDOT Major Activities	WSDOT Key Measure Areas	WSDOT Potential Measures	WSDOT Target
To improve statewide mobility of people, goods, information & energy.	To improve the predicable movement of people and goods.	Efficient Use of Highways: Urban Areas Measure: Change in 95% reliable travel time in key corridors	• Demand management • Traffic operations • Capital projects	• Effectiveness of highway projects in relieving congestion • Effectiveness of traffic operations and demand management or cost per throughput	• Before and after congestion results-case studies • TBD (e.g., change in person throughput per lane during peak periods)	
		Efficient Use of Highways Statewide Measure: Throughput on all state highways	• Maintenance • Snow and ice • Incident response	• Maintenance quality • Avalanche control • Incident response	• number of WSDOT's 22 maintenance targets achieved • Closure times: 1-90, Snoqualmie Pass • Average number of minutes to clear incidents that last over 90 minutes	
		WSF Operations Measure: Capital asset development to meet 5, 10 and 15 year load projections	• Operations • Maintenance • Capital projects	• Trip reliability • Customer satisfaction, affordability	• Trip reliability index • Customer survey results	
		Transit Ridership	• ACCT • Grants	• Disadvantaged ridership * • Non-urban area access to transit *	• TBD (e.g., number of one-way trips provided for transportation disadvantaged) • TBD (e.g., annual public transit ridership in rural areas)	

* New key measure area

c. Goal Three: Effective Managers of Transportation Assets and Public Resources

i. Current goals and measures

WSDOT's responsibility for effectively managing transportation assets and public resources is fundamental to the organization. In 2003-07 Business Directions WSDOT states: "Everything comes together, however, in the overriding need to demonstrate the best possible return for every dollar of taxpayer investment/legislative appropriation."[14]

Management of transportation asset and public resources is reviewed in four areas: preservation, capital project delivery, environment and workforce. Current key measures, as either identified in the Sept. 2005 issue of the *Gray Notebook* or benchmarks mandated by RCW 47.01.012, are related to preservation of highways, bridges and ferries; highway capital project delivery; reporting on capital projects;[15] and workforce training and safety.

A full review of WSDOT's management of transportation assets and public resources related goals and plans, current benchmarks, and key and other measures is in Appendix I with other states' measures.[16]

ii. Proposed measures

The proposed measures are intended to reflect the importance of: preservation of the existing transportation system; the delivery of on-time, on-schedule, quality capital projects; environmental stewardship; workforce safety; and the need for an engineering staff and project managers to deliver its capital program.

WSDOT is working to improve its capital project reporting, focusing on reporting schedule and budget information. Discussions with WSDOT staff and other stakeholders indicate a concern that the focus on schedule and budget be balanced by a focus on quality. When reporting against project schedules and budgets, it is important that WSDOT report against the original project schedule and budget as well as the revised budget and schedule to provide consistent reporting.

The Transportation Working Group has agreed on the definition of six key project milestones for reporting and WSDOT has produced the first such reports.

It is proposed that WSDOT develop a construction quality measurement system. The measure related to the skills of project managers and engineering staff is a new measure in an area critical to WSDOT's ability to deliver its capital program.

The measures recommended for preservation are not new. They however propose a change to the benchmark included in RCW 47.01.012 that set as a goal having no roads or bridges in poor condition. WSDOT has indicated that this is inconsistent with the best life–cycle cost approach with a better measure of performance being against the optimal life-cycle rating, where some pavement or bridges will be in poor condition.[17] This revision is also consistent with the intent of House Bill 1969 that was passed by the House in the last legislative session.[18]

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14. WSDOT, 2003-2007 Business Directions, May 2004 (update), p. 1.

15. The JLARC *Review of Accountability Mechanisms for WSDOT* (August 2005), recommended this key performance measure: percentage of capital projects for which standardized performance data (cost and schedule progress) are available.

16. Other states also use the same measures as WSDOT. These are not listed in the appendix.

17. Transportation Benchmarks Implementation Report, August 2003, p. 12.

18. Substitute House Bill 1969 states as one of its goals, "Maintaining the existing system: The state's transportation system, including interstate highways, state routes, bridges, and local arterials, shall be maintained and preserved at an optimal percentage of life–cycle rating."

Table 18: WSDOT Effective Management of Transportation Assets and Public Resources, Current Measures

Program	State Plans/Goals	Benchmarks/Key Measures	Categories Measured	Other States' Measures
Preservation	• 2003-07 Business Directions • WA Transportation Plan • State Highway Plan • WSF Progress Report 2003	**Gray Notebook Sept. 05** • Pavement conditions: percent of pavement in good or poor condition by type • Bridge conditions: percent of bridges in good, fair or poor condition • Ferry life cycle preservation: Planned projects versus actual systems/structures preserved, changed in cost rating **RCW 47.01.012** • No interstate highways, state routes, and local arterials shall be in poor condition	• Pavement conditions • Bridge preservation • Ferry preservation	
Capital Project Delivery	• JLARC Review of Accountability Mechanisms for WSDOT 2005 • Project Control and Reporting Guide: Managing Program Delivery at the Project Level 2005 • Business Directions 2003-2007	**Gray Notebook Sept. 05** • Schedule, scope and budget summary of nickel and TPA projects: planned vs. actual results of scope, schedule and budget. • Project delivery milestone reporting: compares planned delivery milestone dates against actual completion dates. • Highway construction program advertisements: planned vs. actual number of projects advertised. • Cash flow on highway construction projects: planned vs. actual expenditures for preservation and improvement programs. • Individual contracts: final cost to award amount: percent of final costs above or below award. **Review of Accountability Mechanisms for WSDOT Joint Legislative Audit and Review Committee Aug. 2005** • Recommended key performance measure: percent of capital projects for which standardized performance data (cost and schedule progress) are available.	• Costs • Construction program delivery • Ferry investments	Construction quality[19]
Environment	• Business Directions 2003-2007 • Environmental Policy Statement (2001) • WSDOT Executive Order on Context Sensitive Solutions • Transportation Efficiency and Accountability Committee • Wash. State Transportation Plan		• Fish passage • Construction runoff • Replacement wetlands • Erosion control • Stormwater treatment • Environmental compliance • EIS tracking • ESA compliance	• Land mgmt. • Cultural/historic resources • Community planning • Wildlife • Dept. mgmt.
Workforce	• Business Directions 2003-2007	**Gray Notebook Sept. 05** • Workforce training: compliance ratings for 17 training courses • Workforce safety: Recordable injuries per 100 workers	• Workforce levels • Training • Workforce safety	• Leadership • Workforce development • Internal communication • Employee suggestions

19. Virginia measures construction quality through a construction quality compliance program. See *Quarterly Report: First Quarter Fiscal Year 2006*, p.1

Table 19: Proposed Management of Transportation Assets and Public Resources Measures

POG	Goal	Objective/System Measure	WSDOT Major Activities	WSDOT Key Measure Area	WSDOT Potential Measure	WSDOT Target
To improve statewide mobility of people, goods, information & energy.	To be good stewards of transportation assets and public resources.	Preservation Measure: Achievement of optimal life cycle % on all transportation assets	• Paving • Bridge repairs and preservation • Ferry terminal preservation • Ferry vessel preservation	• Pavement condition • Bridge preservation • Ferry preservation	• Percent of pavement in good, fair or poor condition vs. optimal life cycle percent rating • Percent of bridges in good, fair or poor conditions vs. optimal life cycle percent rating • Life cycle rating for vessels vs. optimal life cycle rating	
		Capital project quality and delivery Measure: Project status and quality of construction	• Capital projects	• On-time/on-budget highway project status • On-time/on-budget ferry project status • Construction quality • Reasonable mitigation undertaking and costs	• Percent of highway projects complete on schedule and budget • Percent of ferry projects complete on schedule and budget • Quality rating system to be developed • TBD (e.g., costs of mitigation in relation to project objectives)	
		Environmental management Measure: Transportation system adhere to environmental regulations		• Environmental compliance	• Number of projects in compliance	
		Workforce management Measure: Employee satisfaction	• Human resources management	• Skill level of project managers and engineering staff • Workforce safety	• TBD (e.g., percent of project managers and engineering staff with skills that meet WSDOT needs) • Recordable injuries per 100 workers	

B. Investment Criteria and Process Recommendation

1. Relate investment criteria to performance measures

The state should use system performance measures in reporting the predicted and actual effectiveness of investments proposed in the transportation plans and in the budget. The WSDOT should update predictions of system performance based on the adopted budget signed into law.

Section C, following, lists the investment criteria in state law under the overarching goals described in the previous section. The last subsection identifies criteria that do not appear to fit one of these goals.

2. Consistent reporting

Transportation goals, objectives and measures should be reported consistently in the twenty-year transportation plan, the ten-year investment plan and the budget.

3. Evaluate planning requirements and need

Major transportation capital investment decisions made by the Legislature in 2003 and 2005 will result in a reduced need for planning information to inform additional investment decisions in the near term. The Governor and OFM, along with the Department of Transportation, should evaluate the possible suspension or minimization of state transportation planning and state investment related transportation planning by regional planning agencies for the next six years, effective July 1, 2006. The purpose of this suspension is to allow the necessary focus on implementing the State's major capital investment program.

C. Investment Criteria According to Proposed Transportation Goals

To improve the safety and security of transportation customers and system:

RCW 47.05.051: Ten–Year Comprehensive Investment Program

Priority programming for the improvement program may also take into account:

Accident and accident risk reduction.

RCW 47.06.050: State-Owned Facilities Component

Identify current and future structural deficiencies based upon analysis of current conditions and projected future deterioration.

Establish operational objectives, including safety considerations, for moving people and goods on the state highway system.

Identify current and future capacity, operational, and safety deficiencies, and recommend program funding levels, specific improvements and strategies necessary to achieve the operational objectives.

Transportation Plan

Improvement of traveler safety.

To improve the predictable movement of people and goods:

RCW 47.05.051: Ten-Year Comprehensive Investment Program

Priority programming for the improvement program must be based primarily upon the following, not necessarily in order of importance:

Traffic congestion, delay, and accidents.

Location within a heavily traveled transportation corridor.

Synchronization with other potential transportation projects, including transit and multimodal projects, within the heavily traveled corridor.

Projects that yield freight mobility benefits or that alleviate the impacts of freight mobility upon affected communities.

Continuity and systematic development of the highway transportation network.

Opportunities for multimodal transportation.

Relief of congestion.

Efficient movement of freight and goods.

Improvement and integration of all transportation modes to create a seamless intermodal transportation system for people and goods.

RCW 47.06.045: Freight Mobility Plan

Assess the transportation needs to ensure the safe, reliable, and efficient movement of goods within and through the state and to ensure the state's economic vitality.

RCW 47.06.050: State-Owned Facilities Component

First assess strategies to enhance the operational efficiency of the existing system before recommending system expansion. Strategies to enhance the operational efficiencies include but are not limited to access management, transportation system management, demand management, and high-occupancy vehicle facilities.

RCW 47.06.140: Transportation Facilities and Services of Statewide Significance — Level of Service Standards.

Set level of service standards for state highways and state ferry routes of statewide significance.
Consider the necessary balance between providing for the free inter-jurisdictional movement of people and goods and the needs of local communities using these facilities.

RCW 47.06.050: State-Owned Facilities Component

Identify the needs of non-motorized transportation modes on the state transportation systems and provide the basis for the investment of state transportation funds in paths and trails, including funding provided under chapter 47.30 RCW.

RCW 47.06.100: Bicycle Transportation and Pedestrian Walkways Plan

Integrate bicycle and pedestrian pathways with other transportation modes.
Assess the role of such facilities in reducing traffic congestion.

Note on Intent [2002 c 5 § 405.]

"The legislature intends that funding for transportation mobility improvements be allocated to the worst traffic chokepoints in the state. Furthermore, the legislature intends to fund projects that provide systemic relief throughout a transportation corridor, rather than spot improvements that fail to improve overall mobility within a corridor."

To be effective managers of transportation assets and public resources:

RCW 47.05.051: Ten–Year Comprehensive Investment Program

Priority programming for the preservation program shall take into account the following, not necessarily in order of importance:

Extend the service life of the existing highway system, including using the most cost-effective pavement surfaces, considering:

- Life-cycle cost analysis.
- Traffic volume.
- Subgrade soil conditions

- Environmental and weather conditions.
- Materials available.
- Construction factors.
- Ensuring the structural ability to carry loads imposed upon highways and bridges.
- Minimizing life cycle costs.

The conservation of energy resources.

Feasibility of financing the full proposed improvement.

Commitments established in previous legislative sessions.

Relative costs and benefits of candidate programs.

Protection of the state's natural environment.

Use of benefit/cost analysis wherever feasible to determine the value of the proposed project.

The cost-effective movement of people and goods.

Identify and document potential affected environmental resources, including, but not limited to, wetlands, storm water runoff, flooding, air quality, fish passage, and wildlife habitat.

Conform to the state implementation plan for air quality and be consistent with regional transportation plans adopted under chapter 47.80 RCW.

RCW 47.06.050: State-Owned Facilities Component — Ferry Plan

Establish service objectives for state ferry routes.

Forecast travel demand for the various markets served in the ferry system.

Develop strategies for ferry system investment that consider regional and statewide vehicle and passenger needs.

Assure that ferry services are fully integrated with other transportation services.

Provide for maintenance of capital assets.

Provide for preservation of capital assets based on lowest life cycle cost methodologies. The plan shall assess the role of private ferries operating under the authority of the utilities and transportation commission.

Coordinate ferry system capital and operational plans with these private operations.

RCW 47.06.090: Intercity Passenger Rail Plan

Identify all such assets and provide a preservation plan based on lowest life cycle cost methodologies.

RCW 47.06.130: Special Planning Studies — Cost-Benefit Analysis.

Conduct multimodal corridor analyses on major congested corridors where needed improvements are likely to cost in excess of one hundred million dollars. Analysis will include the cost-effectiveness of all feasible strategies in addressing congestion or improving mobility within the corridor, and must recommend the most effective strategy or mix of strategies to address identified deficiencies.

A long-term view of corridors must be employed to determine whether an existing corridor should be expanded, a city or county road should become a state route, and whether a new corridor is needed to alleviate congestion and enhance mobility based on travel demand.

To the extent practicable, full costs of all strategies must be reflected in the analysis.

At a minimum, this analysis must include:

- The current and projected future demand for total person trips on that corridor.
- The impact of making no improvements to that corridor.
- The daily cost per added person served for each mode or improvement proposed to meet demand.
- The cost per hour of travel time saved per day for each mode or improvement proposed to meet demand.
- How much of the current and anticipated future demand will be met and left unmet for each mode or improvement proposed to meet demand.

The end result of this analysis will be to provide a cost-benefit analysis by which policymakers can determine the most cost–effective improvement or mode, or mix of improvements and modes, for increasing mobility and reducing congestion.

Other:

RCW 47.05.051: Ten–Year Comprehensive Investment Program

Support for the state's economy, including job creation and job preservation.

Support for development in and revitalization of existing downtowns.

Extent that development implements local comprehensive plans for rural and urban residential and nonresidential densities.

Extent of compact, transit-oriented development for rural and urban residential and nonresidential densities.

Consistency with local comprehensive plans developed under chapter 36.70A, except for projects in cities having a population of less than five thousand persons (priority programming).

Extent to which the project accommodates planned growth and economic development.

Consistency with regional transportation plans developed under chapter 47.80 RCW.

Public views concerning proposed improvements.

RCW 47.06.030: Transportation Policy Plan

Be consistent with the state's growth management goals.

Expedite the completion of industrial projects of statewide significance.

RCW 47.06.040: Statewide Multimodal Transportation Plan

Ability to attract or accommodate planned population.

Employment growth.

Preservation of existing investments and downtowns.

Identify and recommend designation of scenic and recreational highways.

RCW 47.06.050: State-Owned Facilities Component

Provide for enhanced access to scenic, recreational, and cultural resources associated with designated routes.

Recommend a variety of management strategies to protect, preserve, and enhance these resources.

Be consistent with the regional transportation plans for areas served by the state ferry system.

Be developed in conjunction with the ferry advisory committees.

Support local land use plans.

D. Legislative Action

A. Amend 47.01.012 to substitute the proposed three overarching goals with system measures for the current benchmarks ensuring alignment between the measures and the overarching transportation goals. (See Attachment A.)

B. Amend 47.01.012 to have WSDOT submit an annual report on the attainment of transportation goals, objectives and measures.

Attainment Report Example from State of Maryland

The State of Maryland[20] requires a 20–year state transportation plan (MTP) to be expressed in terms of goals and objectives, with a summary of programs and projects to accomplish those goals and objectives. The 20–year plan must be updated every five years. The legislation requires an annual consolidated transportation program (CTP), which includes, among other things, a six–year listing of programs and projects. The consolidated transportation program must be cross-referenced to an annual report "on the attainment of transportation goals and benchmarks for the approved and proposed MTP and the approved and proposed CTP." The legislation allows the Maryland Department of Transportation to establish key performance measures in and to set attainment targets.

The attainment report must include:

1. Measurable performance indicators or benchmarks, in priority funding areas, designed to quantify the goals and objectives specified in the MTP.
2. The degree to which projects and programs in the MTP and CTP attain those goals and benchmarks.
3. Include the following measurable transportation indicators:
    a. Increase in total trips for each of transit, high-occupancy auto, pedestrian and bicycle mode of travel;
    b. Decrease in indicators of traffic congestion as determined by the Department; and traffic and increasing the use of non–auto traffic.

In addition, the attainment report must:

a. Make the results easily understood by the public.
b. Include projected long-term trends for each indicator and the effect of planned transportation investments.
c. Account for the effect of planned transportation investments.
d. Account for automobile trips not taken due to demand management measures.
e. Indicate the cost effectiveness of investments to achieve performance goals and benchmarks.
f. Any projected increase or decrease in indicators of traffic congestion.
g. Cost per passenger mile and other indicators of cost-effectiveness.

C. Amend 47.05.030 and 47.05.051 to require the ten-year investment program to relate to the three overarching goals with a link to the annual report on the attainment of transportation goals, objectives and measures. (See Attachment B)

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20. Maryland Code, Section 2-103.1.

D. Adopt proviso language that will require a report back to the Legislature from the Governor, Office of Financial Management and Department of Transportation by December 31, 2006.

1. This report shall align a performance measurement system for the Department of Transportation with:
   (a) the priorities of government,
   (b) the goals and objectives set forth in the amended 47.01.012, 47.05.030 and 47.05.051
   (c) transportation budget
   (d) planning requirements
   (e) three year investment plan, and
   (f) RCW 43.88.

2. This report should include the following:
   (a) Glossary of common terms;
   (b) Proposed objective, performance measures and targets with consideration of the recommendations found in the TPAB Study of Benchmarks, Goals and Performance Measures;
   (c) Proposed method for including projected attainment of transportation goals and objectives with the transportation budget and ten–year investment plan;
   (d) Proposed method for demonstrating how all transportation plans including the Washington Transportation Plan (20–year plan), ten–year investment plan, and three–year plan will align with the goals and objectives, and
   (e) Recommendation for modifications to of RCW 47.01.071, 47,01.075, 47.06.020, 47.06.030, 47.06.040, 47.06.043, 47.06.045, 47.06.050, 47.06.060, 47.06.070, 47.06.080. 47.06.090, 47.06.100, 47.06.110, 47.06.130 and 47.06.140 to be consistent with transportation goals and objectives.

E. Adopt proviso language to require TPAB or its successor to recommend objectives that would implement the state transportation goals for all authorized and funded state transportation agencies.

F. Planning Process Budget Evaluation

Major transportation capital investment decisions made by the Legislature in 2003 and 2005 will result in a reduced need for planning information to inform additional investment decisions in the near term. The Governor and OFM, along with the Department of Transportation, are requested to evaluate the possible suspension or minimization of state transportation planning and state investment related transportation planning by regional planning agencies for the next six years, effective July 1, 2006.

The purpose of this suspension is to allow the necessary focus on implementing the State's major capital investment program. A report from the Governor to the Senate and House Transportation Committees on this subject is requested by June 30, 2006.

The suspension would occur with certain specific exceptions. Exceptions could include:

1. completing the ongoing Washington Transportation Plan;
2. completing ongoing corridor studies and establish deadlines;

3. ongoing or new regional efforts designed to take advantage of regional/county funding options under policies adopted in the last several years encouraging regional partnerships with the state;
4. prioritization of biennial pre-existing fund expenditures;
5. carefully specified ferry system, rail capacity and tolling corridor issues;
6. planning absolutely required to comply with Federal Transportation and State Transportation and Growth Management planning requirements; however,
   a) the Governor should seek a temporary waiver from as many Federal planning requirements as possible;
   b) the evaluation should include consideration of temporarily waiving or suspending as many State planning paperwork requirements as possible;
   c) limited other exceptions approved by the Governor or her designee.

Proposed Revisions to RCW 47.01.012

Intent: 2002 c 5.

(1) It is the intent of the legislature to establish policy goals for the planning, operation, performance of, and investment in, the state's transportation system. The policy goals shall be consistent with the benchmark categories adopted by the state's Blue Ribbon Commission on Transportation on November 30, 2000. Public investments in transportation shall support achievement of these and other priority goals:

(a) To improve the safety and security of transportation customers the transportation system;

(b) To improve the predictable movement of people and goods

(c) To be effective managers of transportation assets and public resources.

(2) These policy goals shall be the basis for establishment of detailed and measurable objectives, performance measures, and targets.

(3) It is the intent of the legislature that the transportation commission, its successor entity, or any other citizen oversight panel created by the legislature, and the department of transportation shall establish performance measures to ensure transportation system performance meets the goals established in subsection (1) of this section at local, regional, and state government levels, the transportation commission, and the department should work with appropriate government entities to accomplish this.

(4) Beginning with the 2007 biennial transportation budget and continuing thereafter, before the legislature considers the proposed Washington State Transportation Plan and the proposed department budget, the department shall submit an annual report on the attainment of transportation goals and objectives for the approved and proposed Washington Transportation Plan and approved and proposed transportation budget. This report shall include:

(a) The establishment of objectives, performance measures and targets, in priority funding areas at a minimum, designed to quantify the goals set forth in section (1) of this section, and specified in the Washington Transportation Plan;

(b) The degree to which the projects and programs contained in the approved Washington Transportation Plan and transportation budget and ten–year investment plan attain those goals as measured by the objectives, performance measures and targets.

VI. Recommendations and Objectives

Section I of this report outlined seven objectives for this study. This section shows how recommendations meet objectives.

OBJECTIVE 1: Improve the use of performance measures for external accountability, communication and reporting.

Criterion 1a: Does the performance measurement system allow conformance with the GASB suggested criteria for effective communication?

Yes, the recommendations conform with the Governmental Accounting Standards Board. The board recommended 16 criteria in their special report, *Reporting Performance Information: Suggested Criteria for Effective Communication,* as outlined in Table 20.

Criterion 1b: Do the performance measures reflect available information about public interest in accountability?

Yes, WSDOT's public surveys include information about public interest in performance reporting. In its report *Public Views on Washington State Transportation and Funding* in November 2004, Sage Projections found in a survey in five targeted areas (Olympic Peninsula, Clark County, Spokane County, Tri-Cities and Wenatchee) that the respondents believed that "knowing where the money is spent" and "knowing that projects are on time and within budget" are the best ways of demonstrating accountability. Two of the capital project reporting measures relate to the on time and on-budget delivery of capital highway and ferry projects.

OBJECTIVE 2: Relate the performance measures and investment criteria to the overarching performance goals of the state transportation system.

Criterion 2a: Is there stakeholder concurrence on identification of overarching performance goals?

Yes, the consultants used the result of their survey of best practices in other jurisdictions and a review of WSDOT's planning documents to recommend performance goals for WSDOT, TPAB and stakeholder agreement.

Criterion 2b: Do the proposed overarching performance goals allow WSDOT to report on key measures of accountability in a comprehensive, yet concise manner?

Yes, the recommendation is to focus on key measures that relate to WSDOT's primary responsibilities.

Criterion 2c: Do the proposed overarching performance goals encompass the array of significant WSDOT program goals and strategic plans?

Yes, the proposed performance measures broaden the scope from an urban highway focus to statewide, multi-modal measures.

Table 20: GASB Criteria and Recommendations

GASB Criteria	Recommendations Conform to Criteria
Purpose and scope	The recommended performance measures would allow coverage of key, major or critical programs and services.
Statement of major goals and objectives	The proposed performance measures broaden the scope from an urban highway focus to statewide, multi-modal measures.
Involvement in establishing goals and objectives.	It is recommended that the major goals and objectives be mandated by legislative action.
Multiple levels of reporting	The recommendation for a tiered performance measurement system allows for multiple levels of reporting.
Analysis results and challenges	Reporting on the performance measures would allow for analysis of the results and challenges facing WSDOT.
Focus on key measures	The recommendation is to focus on less than thirty key measures.
Reliable information	WSDOT currently reports on many of the recommended measures and has a strong track record of providing reliable information.
Relevant measures of results	The proposed measures are relevant to WSDOT's major activities and objectives.
Resources used and efficiency	Some of the recommended measures include cost information (i.e. capital project delivery within budget).
Citizen and customer perceptions	Customer satisfaction with WSF is one of proposed key measure areas.
Comparisons for assessing performance	Comparisons are proposed as progress over time against WSDOT established targets.
Factors affecting results	Reporting on these performance measures would allow for the identification of factors affecting results.
Aggregation and desegregation of information	The tiered performance management system allows for the aggregation & desegregation of information.
Consistency	The recommendation allows for consistent reporting against key objectives and measures.
Easy to find, access and understand.	This will be addressed in the communications phase of this project.
Regular and timely reporting	Reporting can continue to be quarterly as with the current Gray Notebooks or annual as in Maryland.

OBJECTIVE 3: Distinguish between transportation system performance, state agencies' performance and WSDOT performance.

Criterion 3a: Does the proposed measurement system lend itself to providing tiered information from the transportation system to the individual agency responsibility?

Yes, the proposed tiered performance measurement system distinguishes transportation system performance from WSDOT's agency responsibility in those areas (e.g., safety) where many agencies and factors affect the system measure (in the case of reducing highway hazards deaths/per VMT are affected by the Washington State Patrol, the Washington Traffic Commission and the Department of Licensing as well as WSDOT.)

OBJECTIVE 4: Identify and consistently report on a few key accountability measures.

Criterion 4a: Can the proposed key measures be consistently tracked?

Yes, the report recommends the identification of not more than 30 key measures that can be consistently tracked and reported.

OBJECTIVE 5: Clarify accountability measurement terminology by simplifying it and conforming to GMAP and POG programs.

Criterion 5a: Does the proposed performance measurement system conform to GMAP and POG?

Yes, the proposed performance measurement system, which conforms with RCW 43.88, can crosswalk to the GMAP model that identifies outputs that relate to immediate outcomes, intermediate outcomes and ultimate outcomes.

Intermediate Outcomes = Key Performance Measures

Ultimate Outcomes = POG Measures

OBJECTIVE 6: Distinguish performance accountability measure reporting from organizational reporting.

Criterion 6a: Does the performance measurement system lend itself to a multi–layered reporting system linking the overarching performance goals of the state transportation system, WSDOT's key measures and on-going organizational reporting?

Yes, the recommended system would allow for the development of a multi-layered reporting system that would link to on-going organizational reporting.

OBJECTIVE 7: Provide for evolution of performance measures.

Criterion 7a: Does the system describe the next steps in the evolution of performance measures and when they should be accomplished?

Yes, the recommended system would allow for the evolution of performance measures because the particular measures would not be legislatively proscribed.

Criterion 7b: Does the performance measurement system include a "new measures" component that will allow for integration of refinements in data collection and analysis of transportation systems?

Yes, it is recommended that WSDOT be allowed to chose the performance measures within the objectives so that the system can evolve with refinements in data collection and analysis of transportation systems.

OBJECTIVE 8: Make transportation investment criteria clear, with clearly stated goals and priorities.

Criterion 8a: Do the investment criteria derive from a simple set of instructions?

Yes, it is recommended that the investment criteria align with the overarching performance goals and key measures.

Criterion 8b: Do the investment criteria relate to the overarching performance goals of the state transportation system?

Yes, it is recommended that the state align planning, investment criteria, budgeting, and performance measures with the overarching performance goals of the state transportation system. Figure 5 outlines the recommended state transportation investment process.

Figure 4. Current WSDOT Investment Process

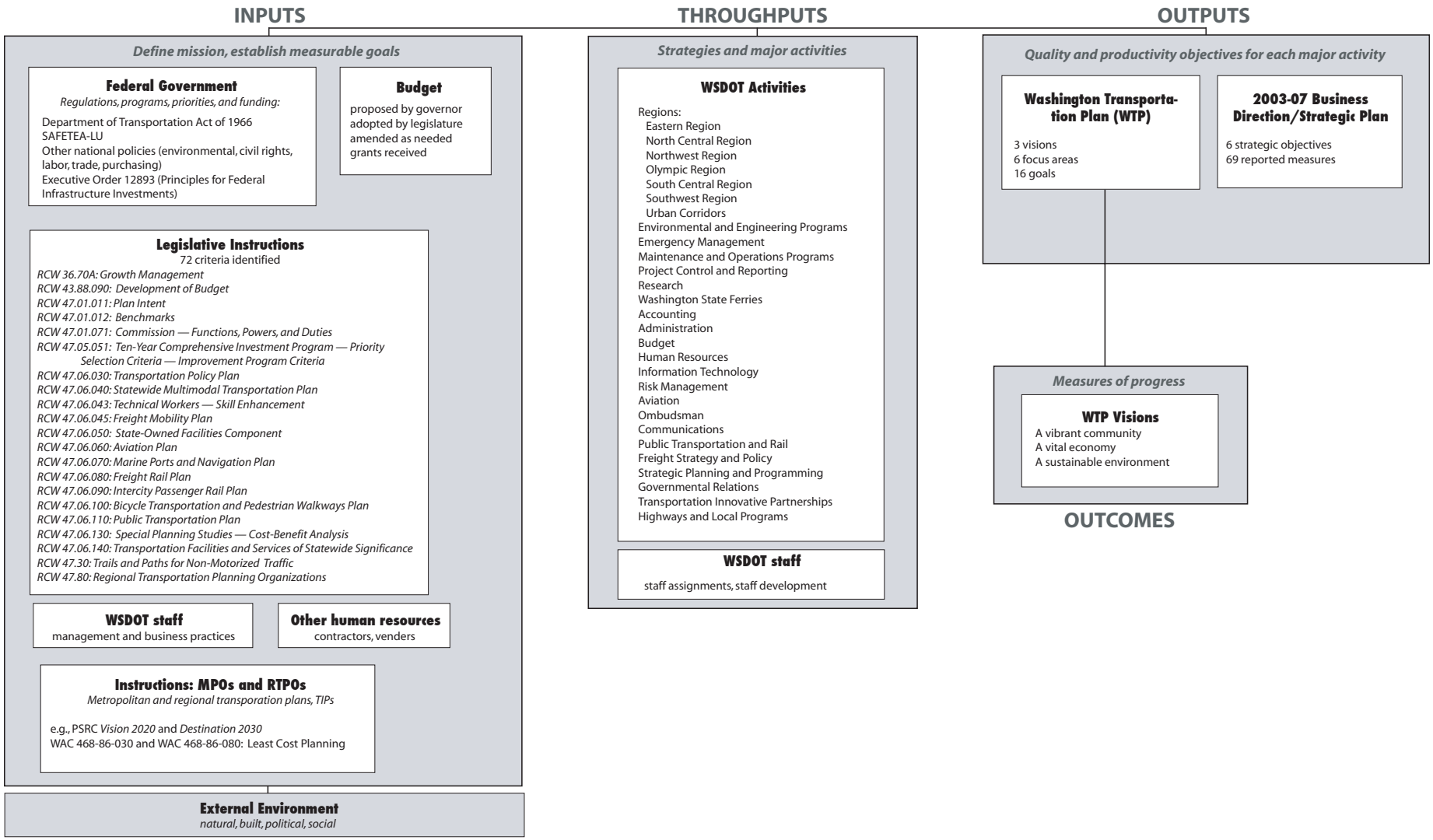
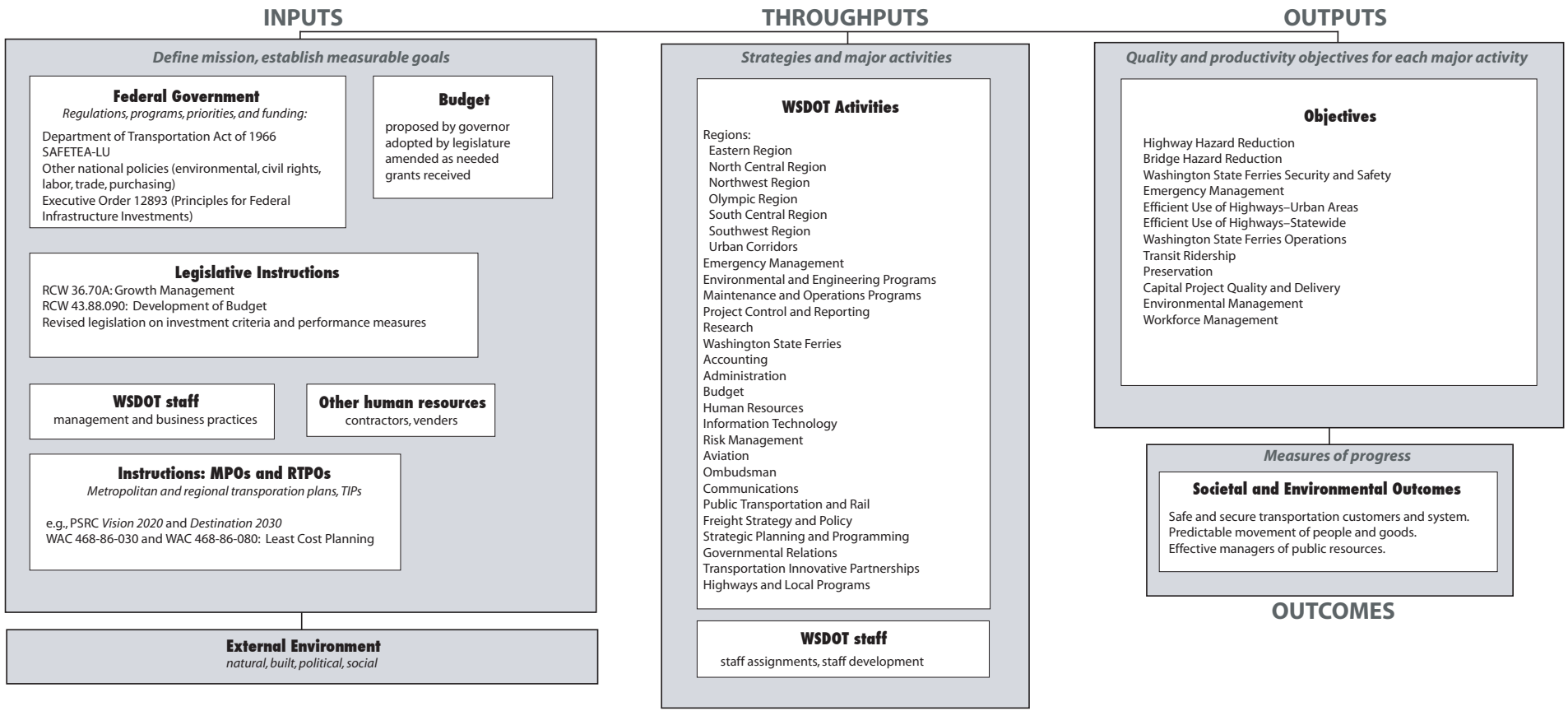


Figure 5. Recommended Alignment of WSDOT Investment Process



VII. PowerPoint Presentation to TPAB

Transportation Performance Audit Board (TPAB) Study of Transportation Goals, Benchmarks and Ten-Year Investment Criteria and Process

Lund Consulting, Inc.
Cedar River Group
January 6, 2006

SAFETY

MOVEMENT

MANAGEMENT OF PUBLIC RESOURCES

Legislative Direction

The consultant team has been directed by TPAB to conduct a study and make recommendations related to the goals, benchmarks, investment criteria, and performance measures currently in state law relative to the Washington State Department of Transportation.

2005 Washington State Legislature mandates:

TPAB shall conduct a study and make recommendations modifying RCW 47.01.012, state goals and benchmarks. (ESSB 6091 Section 206 subsection 2).

TPAB shall as soon as practicable, conduct a review of the comprehensive ten-year investment program process, including criteria under RCW 47.05.030 and RCW 47.05.051. (ESSB 5513 Section 19 subsection 2).

TPAB must develop performance measures and benchmarks for the evaluation of expenditures of the transportation partnership account. (ESSB 6103 Section 104 subsection 3).

Methodology

Literature review

General Accounting Standards Board (GASB) guidelines

Federal laws

State laws

Best practices

Study Objectives

Objective 1: Improve the use of performance measures for external accountability, communication and reporting.

Objective 2: Relate the performance measures and investment criteria to the overarching performance goals of the state transportation system.

Objective 3: Distinguish between transportation system performance, state agencies and WSDOT performance.

Objective 4: Identify and consistently report on a few key accountability measures.

Study Objectives

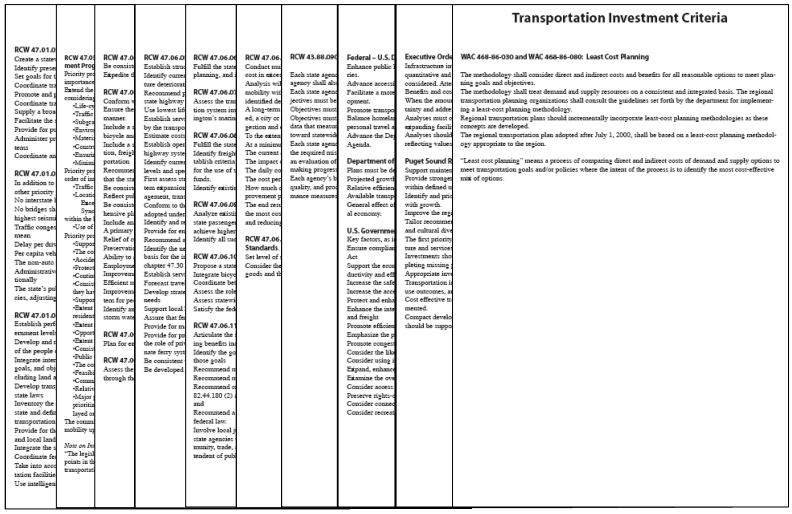
Objective 5: Clarify accountability measurement terminology by simplifying it and conforming to measurement terminology used in the GMAP and POG programs.

Objective 6: Distinguish performance accountability measure reporting from organizational reporting.

Objective 7: Provide for evolution of performance measures.

Objective 8: Make transportation investment criteria clear, with clearly stated goals and priorities.

Current Benchmarks, Performance Measures, and Investment Criteria



Best Practices

The consultants reviewed performance measurement in the following ten states listed in WSDOT's *"State of the Practice" Inventory March 2004 – Learning from Others,* and also states suggested by TPAB:

- Florida Department of Transportation
- Kentucky Transportation Cabinet
- Maryland Department of Transportation
- Michigan Department of Transportation
- Minnesota Department of Transportation
- Missouri Department of Transportation
- New Mexico Department of Transportation
- Ohio Department of Transportation
- Oregon Department of Transportation
- Virginia Department of Transportation

Best Practices

- Three to four performance goals for transportation system
- Establish goals in transportation plan to frame measures & criteria
- Link goals to measures through systematic process of objectives
- Distinguish department performance from system performance
- Limited number of key measures
- Effectiveness and customer satisfaction measures
- Easily digested and readable reports for the public
- State laws allow for evolution of performance measures
- Cross-walk to statewide performance measure systems

Key Recommendations

1. Use common terminology.
2. Use three overarching performance goals.
3. Use three to five objectives for each performance goal.
4. Use thirty or fewer key performance measures.
5. Align planning requirements and investment criteria with the overarching goals.
6. Draft new legislation that is concise and consistent regarding transportation investments and priorities.

Additional Recommendations

Do not codify performance measures. They need to be flexible.

Focus on system performance and distinguish between transportation system performance, state agencies and WSDOT performance.

Update predictions of system performance based on the adopted budget signed into law.

Bring other transportation agencies into the same alignment as that being proposed for WSDOT.

Proposed WSDOT Goals, Objectives and Key Measures

Priority of Government (POG)

Goal

Objective/System Measure

WSDOT Activity

WSDOT Key Measure Area

WSDOT Potential Measure

WSDOT Target

Proposed WSDOT Goals, Objectives and Key Measures

POG	Goal
To improve the security of people and property	To improve the safety and security of transportation customers & system
To improve statewide mobility of people, goods, information, and energy	To improve the predictable movement of people and goods
	To be effective managers of public resources

Proposed WSDOT Goals, Objectives and Key Measures: Safety and Security

POG	Goal	Objective/System Measure
To improve the security of people and property	To improve the safety and security of transportation customers & system	Objective: Highway hazard reduction *System measure: vehicular accidents (deaths/VMT)* Objective: Bridge hazard reduction *System measure: seismic retrofit status all bridges* Objective: WSF security and safety *System measure: safety plan compliance* Objective: Emergency management *System measure: CEMP readiness*

Proposed WSDOT Goals, Objectives and Key Measures: Safety and Security

POG	Goal	Objective/System Measure	WSDOT Major Activity
To improve the security of people and property	To improve the safety and security of transportation customers & system	Objective: Highway hazard reduction *System measure: vehicular accidents (deaths/VMT)*	•Highway maintenance •Safety capital projects
		Objective: Bridge hazard reduction *System measure: seismic retrofit status all bridges*	•Bridge maintenance •Capital projects
		Objective: WSF security and safety *System measure: safety plan compliance*	•Safety plan •Compliance with MTSA
		Objective: Emergency management *System measure: CEMP readiness*	•CEMP role •JOPS

Proposed WSDOT Goals, Objectives and Key Measures: Safety and Security

POG	Goal	Objective/System Measure	WSDOT Major Activity	WSDOT Key Measure Area
To improve the security of people and property	To improve the safety and security of transportation customers & system	Objective: highway hazard reduction *System measure: vehicular accidents (deaths/VMT)* Objective: bridge hazard reduction *System measure: seismic retrofit status all bridges* Objective: WSF security and safety *System measure: safety plan compliance* Objective: emergency management *System measure: CEMP readiness*	•Highway maintenance •Safety capital projects	1. Safety improvement project delivery 2. Effectiveness of safety projects 3. Vehicular accidents
			•Bridge maintenance •Capital projects	4. Bridge seismic retrofit program status 5. Bridge seismic status WSDOT bridges
			•Safety plan •Compliance with MTSA	6. Safety plan compliance
			•CEMP role •JOPS	7. CEMP preparedness

Proposed WSDOT Goals, Objectives and Key Measures: Safety and Security

POG	Goal	Objective/ System Measure	WSDOT Major Activity	WSDOT Key Measure Area	WSDOT Potential Measure
To improve the security of people and property	To improve the safety and security of transportation customers & system	Objective: highway hazard reduction *System measure: vehicular accidents (deaths/VMT)* Objective: bridge hazard reduction *System measure: seismic retrofit status all bridges* Objective: WSF security and safety *System measure: safety plan compliance* Objective: emergency management *System measure: CEMP readiness*	Highway maintenance Safety capital projects Bridge maintenance Capital projects Safety plan Compliance with MTSA CEMP role JOPS	1. Safety improvement project delivery	1. Number of TPP HAL projects completed
				2. Effectiveness of safety projects	2. Before & after combined average for safety projects collisions/year
				3. Vehicular accidents	3. Highway related deaths – natural and engineered (per VMT)
				4. Bridge seismic retrofit program status	4. Planned vs. actual # of projects advertised in high risk zone
				5. Bridge seismic status WSDOT bridges	5. Percent of bridges meeting WSDOT seismic standards
				6. Safety plan compliance	6. Results of internal safety audits
				7. CEMP preparedness	7. Status of joint WSP/WSDOT measure development

Proposed WSDOT Goals, Objectives and Key Measures: Safety and Security

POG	Goal	Objective/ System Measure	WSDOT Major Activity	WSDOT Key Measure Area	WSDOT Potential Measure	WSDOT Target
To improve the security of people and property	To improve the safety and security of transportation customers & system	Objective: highway hazard reduction *System measure: vehicular accidents (deaths/VMT)* Objective: bridge hazard reduction *System measure: seismic retrofit status all bridges* Objective: WSF security and safety *System measure: safety plan compliance* Objective: emergency management *System measure: CEMP readiness*	Highway maintenance Safety capital projects Bridge maintenance Capital projects Safety plan Compliance with MTSA CEMP role JOPS	1. Safety improvement project delivery 2. Effectiveness of safety projects 3. Vehicular accidents 4. Bridge seismic retrofit program status 5. Bridge seismic status WSDOT bridges 6. Safety plan compliance 7. CEMP preparedness	1. # of TPP HAL projects completed 2. Before & after combined average for safety projects collisions/year 3. Highway related deaths – natural and engineered (per VMT) 4. Planned vs. actual # of projects advertised in high risk zone 5. % of bridges meeting WSDOT seismic standards 6. Results of internal safety audits 7. Status of joint WSP/WSDOT measure development	

Proposed WSDOT Goals, Objectives and Key Measures: Movement of People and Goods

POG	Goal	Objective/System Measure
To improve statewide mobility of people, goods, information, and energy	To improve the predictable movement of people and goods	Objective: Efficient use of highways – urban areas *System measure: Change in 95% reliable travel time on key corridors* Objective: Efficient use of highways – statewide *System measure: Throughput on all state highways* Objective: WSF operations *System measure: Capital asset development to meet 5, 10 and 15-year load projections* Objective: Transit ridership *System measure: Percent of transit seats utilized*

Proposed WSDOT Goals, Objectives and Key Measures: Movement of People and Goods

POG	Goal	Objective/System Measure	WSDOT Major Activity
To improve statewide mobility of people, goods, information, and energy	To improve the predictable movement of people and goods	Objective: Efficient use of highways – urban areas *System measure: Change in 95% reliable travel time on key corridors*	•Demand management •Traffic operations •Capital projects
		Objective: Efficient use of highways – statewide *System measure: Throughput on all state highways*	•Maintenance •Snow and ice •Incident response
		Objective: WSF operations *System measure: Capital asset development to meet 5, 10 and 15-year load projections*	•Operations •Maintenance •Capital projects
		Objective: Transit ridership *System measure: Percent of transit seats utilized*	•ACCT •Grants

Proposed WSDOT Goals, Objectives and Key Measures: Movement of People and Goods

POG	Goal	Objective/System Measure	WSDOT Major Activity	WSDOT Key Measure Area
To improve statewide mobility of people, goods, information, and energy	To improve the predictable movement of people and goods	Objective: Efficient use of highways – urban areas *System measure: Change in 95% reliable travel time on key corridors*	•Demand management •Traffic operations •Capital projects	8. Effectiveness of highway projects in relieving congestion 9. Effectiveness of traffic operations and demand management
		Objective: Efficient use of highways – statewide *System measure: Throughput on all state highways*	•Maintenance •Snow and ice •Incident response	10. Maintenance quality 11. Avalanche control 12. Incident response
		Objective: WSF operations *System measure: Capital asset development to meet 5, 10 and 15-year load projections*	•Operations •Maintenance •Capital projects	13. Trip reliability 14. Customer satisfaction
		Objective: Transit ridership *System measure: Percent of transit seats utilized*	•ACCT •Grants	15. Disadvantaged ridership 16. Non-urban area access to transit

Proposed WSDOT Goals, Objectives and Key Measures: Movement of People and Goods

POG	Goal	Objective/ System Measure	WSDOT Major Activity	WSDOT Key Measure Area	WSDOT Potential Measure
To improve statewide mobility of people, goods, information, and energy	To improve the predictable movement of people and goods	Objective: Efficient use of highways – urban areas *System measure: Change in 95% reliable travel time on key corridors* Objective: Efficient use of highways – statewide *System measure: Throughput on all state highways* Objective: WSF operations *System measure: Capital asset development to meet 5, 10 and 15-year load projections* Objective: Transit ridership *System measure: Percent of transit seats utilized*	Demand management Traffic operations Capital projects Maintenance Snow and ice Incident response Operations Maintenance Capital projects ACCT Grants	8. Effectiveness of highway projects in relieving congestion 9. Effectiveness of traffic operations and demand management 10. Maintenance quality 11. Avalanche control 12. Incident response 13. Trip reliability 14. Customer satisfaction 15. Disadvantaged ridership 16. Non-urban area access to transit	8. Before & after congestion results – case studies 9. TBD (e.g., change in person throughput per lane during peak periods) 10. Number of WSDOT's 22 maintenance targets achieved 11. Closure times: 1-90, Snoq. Pass 12. Average # of minutes to clear incidents that last over 90 minutes 13. Trip reliability index 14. Customer survey results 15. TBD (e.g., # of one-way trips provided for transportation disadvantaged) 16. TBD (e.g., annual public transit ridership in rural areas)

Proposed WSDOT Goals, Objectives and Key Measures: Movement of People and Goods

POG	Goal	Objective/ System Measure	WSDOT Major Activity	WSDOT Key Measure Area	WSDOT Potential Measure	WSDOT Target
To improve statewide mobility of people, goods, information, and energy	To improve the predictable movement of people and goods	Objective: Efficient use of highways – urban areas *System measure: Change in 95% reliable travel time on key corridors* Objective: Efficient use of highways – statewide *System measure: Throughput on all state highways* Objective: WSF operations *System measure: Capital asset development to meet 5, 10 and 15-year load projections* Objective: Transit ridership *System measure: Percent of transit seats utilized*	Demand management Traffic operations Capital projects Maintenance Snow and ice Incident response Operations Maintenance Capital projects ACCT Grants	8. Effectiveness of highway projects in relieving congestion 9. Effectiveness of traffic operations and demand management 10. Maintenance quality 11. Avalanche control 12. Incident response 13. Trip reliability 14. Customer satisfaction 15. Disadvantaged ridership 16. Non-urban area access to transit	8. Before & after congestion results – case studies 9. TBD (e.g., change in person throughput per lane during peak periods) 10. Number of WSDOT's 22 maintenance targets achieved 11. Closure times: 1-90, Snoq. Pass 12. Average # of minutes to clear incidents that last over 90 minutes 13. Trip reliability index 14. Customer survey results 15. TBD (e.g., # of one-way trips provided for transportation disadvantaged) 16. TBD (e.g., annual public transit ridership in rural areas)	

Proposed WSDOT Goals, Objectives and Key Measures: Effective Managers of Public Resources

POG	Goal	Objective/System Measure
To improve statewide mobility of people, goods, information, and energy	To be effective managers of public resources	Objective: Preservation *System measure: Achievement of optimal life cycle % on all transportation assets* Objective: Capital project quality and delivery *System measure: Project status and quality of construction* Objective: Environmental management *System measure: Transportation system adherence to environmental regulations* Objective: Workforce management *System measure: Employee satisfaction*

Proposed WSDOT Goals, Objectives and Key Measures: Effective Managers of Public Resources

POG	Goal	Objective/System Measure	WSDOT Major Activity
To improve statewide mobility of people, goods, information, and energy	To be effective managers of public resources	Objective: Preservation *System measure: Achievement of optimal life cycle % on all transportation assets*	•Pavement paving •Bridge repairs & preservation •Ferry terminal preservation •Ferry vessel preservation
		Objective: Capital project quality and delivery *System measure: Project status and quality of construction*	•Capital projects
		Objective: Environmental management *System measure: Transportation system adherence to environmental regulations*	•Capital project environmental compliance •Operations environmental compliance
		Objective: Workforce management *System measure: Employee satisfaction*	•Human resources management

Proposed WSDOT Goals, Objectives and Key Measures: Effective Managers of Public Resources

POG	Goal	Objective/System Measure	WSDOT Major Activity	WSDOT Key Measure Area
To improve statewide mobility of people, goods, information, and energy	To be effective managers of public resources	Objective: Preservation *System measure: Achievement of optimal life cycle % on all transportation assets* Objective: Capital project quality and delivery *System measure: Project status and quality of construction* Objective: Environmental management *System measure: Transportation system adherence to environmental regulations* Objective: Workforce management *System measure: Employee satisfaction*	•Pavement paving •Bridge repairs & preservation •Ferry terminal preservation •Ferry vessel preservation •Capital projects •Capital project environmental compliance •Operations environmental compliance •Human resources management	17. Pavement condition 18. Bridge condition 19. Ferry preservation 20. On-time/on-budget highway project status 21. On-time/on-budget ferry project status 22. Construction quality 23. Reasonableness of mitigation undertaking and costs 24. Environmental compliance 25. Skill level of project managers and engineering staff 26. Workforce safety

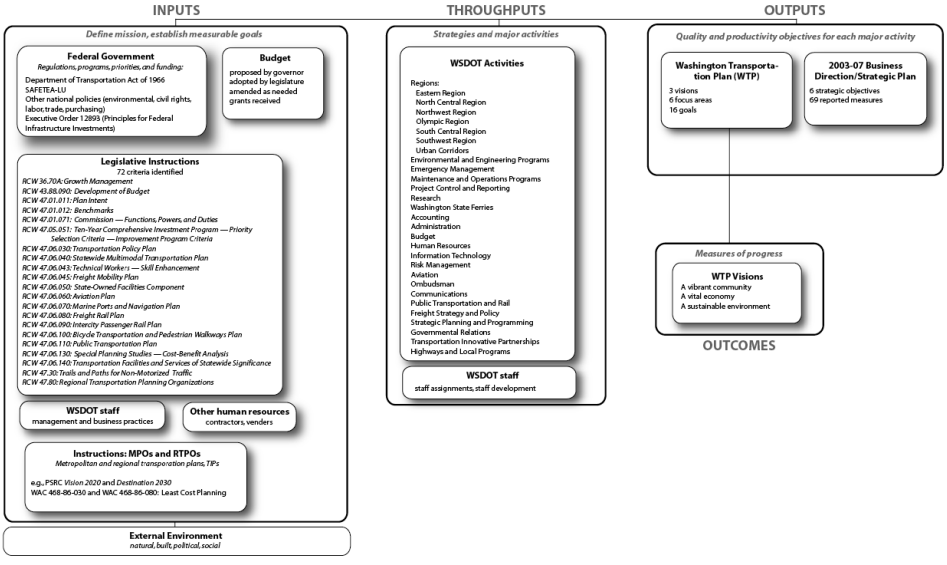
Proposed WSDOT Goals, Objectives and Key Measures: Effective Managers of Public Resources

POG	Goal	Objective/ System Measure	WSDOT Major Activity	WSDOT Key Measure Area	WSDOT Potential Measure
To improve statewide mobility of people, goods, information, and energy	To be effective managers of public resources	Objective: Preservation *System measure: Achievement of optimal life cycle % on all transportation assets* Objective: Capital project quality and delivery *System measure: Project status and quality of construction* Objective: Environmental management *System measure: Transportation system adherence to environmental regulations* Objective: Workforce management *System measure: Employee satisfaction*	Pavement paving Bridge repairs & preservation Ferry terminal preservation Ferry vessel preservation Capital projects Capital project environmental compliance Operations environmental compliance Human resources management	17. Pavement condition 18. Bridge condition 19. Ferry preservation 20. On-time/on-budget highway project status 21. On-time/on-budget ferry project status 22. Construction quality 23. Reasonableness of mitigation undertaking and costs 24. Environmental compliance 25. Skill level of project managers and engineering staff 26. Workforce safety	17. % of pavement in good, fair or poor condition vs. optimal life cycle % rating 18. % of bridges in good, fair or poor condition vs. optimal life cycle % rating 19. Life cycle rating for vessels vs. optimal life cycle rating 20. % of highway projects complete on schedule & budget 21. % of ferry projects complete on schedule & budget 22. Quality rating system to be developed 23. TBD: Costs of mitigation in relation to project objectives 24. Number of projects in compliance 25. TBD (e.g., % of project managers & engineering staff with skills that meet WSDOT needs) 26. Recordable injuries per 100 workers

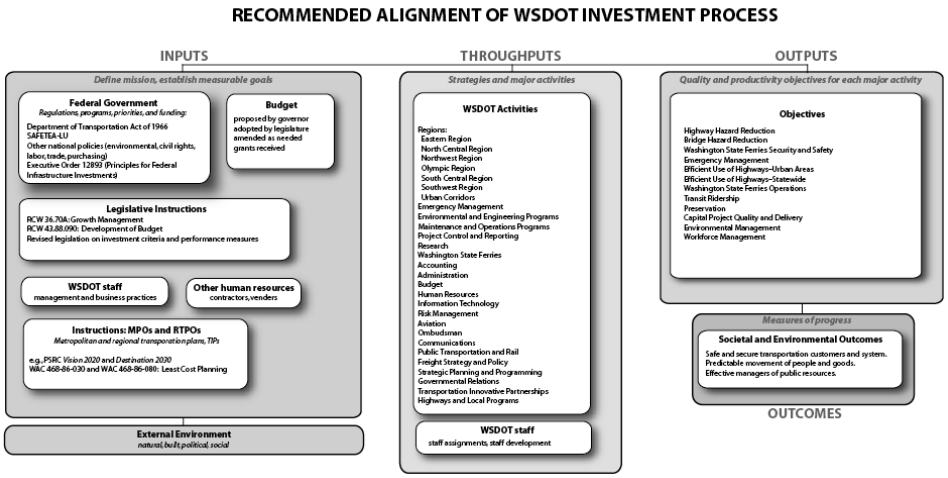
Proposed WSDOT Goals, Objectives and Key Measures: Effective Managers of Public Resources

POG	Goal	Objective/ System Measure	WSDOT Major Activity	WSDOT Key Measure Area	WSDOT Potential Measure	WSDOT Target
To improve statewide mobility of people, goods, information, and energy	To be effective managers of public resources	Objective: Preservation *System measure: Achievement of optimal life cycle % on all transportation assets* Objective: Capital project quality and delivery *System measure: Project status and quality of construction* Objective: Environmental management *System measure: Transportation system adherence to environmental regulations* Objective: Workforce management *System measure: Employee satisfaction*	Pavement paving Bridge repairs & preservation Ferry terminal preservation Ferry vessel preservation Capital projects Capital project environmental compliance Operations environmental compliance Human resources management	17. Pavement condition 18. Bridge condition 19. Ferry preservation 20. On-time/on-budget highway project status 21. On-time/on-budget ferry project status 22. Construction quality 23. Reasonableness of mitigation undertaking and costs 24. Environmental compliance 25. Skill level of project managers and engineering staff 26. Workforce safety	17. % of pavement in good, fair or poor condition vs. optimal life cycle % rating 18. % of bridges in good, fair or poor condition vs. optimal life cycle % rating 19. Life cycle rating for vessels vs. optimal life cycle rating 20. % of highway projects complete on schedule & budget 21. % of ferry projects complete on schedule & budget 22. Quality rating system to be developed 23. TBD: Costs of mitigation in relation to project objectives 24. # of projects in compliance 25. TBD (e.g., % of project managers & engineering staff with skills that meet WSDOT needs) 26. Recordable injuries per 100 workers	

Existing WSDOT Investment Process



Recommended Alignment



Objectives and Recommendations

Objective	Current	Recommended
GASB Criteria	Partial	Yes
Relate measures to system goals	No	Yes
Distinguish WSDOT performance	No	Yes
Consistent reporting on few measures	Partial	Yes
Distinguish from organizational reporting	Partial	Yes
Allow evolution of measures	No	Yes
Investment criteria clear	No	Yes